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CHALLENGE **TB**



**Challenge TB - Indonesia**  
**Year 1**  
**Annual Report**  
**October 1, 2014 – September 30, 2015**

**October 30, 2015**

**Cover photo:**

**Mr Binsar and Keshia Manik, inspired family.**

When Keshia Manik was 5 years old, she was diagnosed with tuberculosis and underwent one-year treatment (2012). Her father, Binsar Manik was diagnosed with MDR TB in 2010 and was declared cured in 2013. Mr Binsar Manik and family proved that the love of the family, support, and trust can overcome any impact of TB on families that is often socio-economically devastating. They also proved that TB and MDR TB can be cured. Now, Mr Binsar and family is living a healthy lifestyle, they appreciate life more and both Mr and Ms Manik actively promote awareness about TB

*(Photo: Trishanty Rondonuwu)*

This report was made possible through the support for Challenge TB provided by the United States Agency for International Development (USAID), under the terms of cooperative agreement number AID-OAA-A-14-00029.

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## Table of Contents

1. Executive Summary .....	9
2. Introduction.....	12
3. Country Achievements by Objective/Sub-Objective.....	16
4. Challenge TB Support to Global Fund Implementation .....	59
5. Challenge TB Success Story .....	62
6. Operations Research .....	67
7. Key Challenges during Implementation and Actions to Overcome Them.....	68
8. Lessons Learnt/ Next Steps .....	68
9. Annex I: Year 1 Results on Mandatory Indicators.....	73
10. Annex II: Status of EMMP activities.....	79
11. Annex II: Financial Report .....	81

## List of Tables

Table 1: Profile of 10 Intensified Districts.....	13
Table 2: Patient group collaboration with other CSO .....	20
Table 3: Number of PLHIV screened for TB, 2013-2014 in 10 CTB districts.....	29
Table 4: Proportion of PLHIV confirmed for TB and DR-TB with Xpert MTB Rif examination in 10 CTB districts .....	30
Table 5: TB Intensified Case Finding among inmates from 24 prisons/DCs in 10 CTB districts 2014-2015. ....	31
Table 6: Treatment results among inmates with TB from prisons/DCs in 10 CTB districts (all TB cases, new and re-treatment) .....	31
Table 7: National TB Program key performance and targets, 2014-2016 .....	33
Table 8: Number of TB patients receive an HIV test and known their status in 10 CTB districts, 2013 – 2014 (up to June) .....	35
Table 9: Number of TB patients with known HIV status based on time of testing, 2013-2014 (up to June) cohort.....	35
Table 10: Number of TB-HIV patients received ART and CPT in 10 CTB districts, 2013 – 2014 (up to June).....	36
Table 11: Priority modules and key interventions of NFM CN 2016-2017 at a glance.....	59

## List of Figures

Figure 1. Challenge TB Geographic Areas .....	13
Figure 2: National Health Ensurance Guideline for TB.....	19
Figure 3. Number of Xpert test and Unsuccessfull test .....	24
Figure 4: National Guidelines for Xpert.....	24
Figure 5: TB-DM Consensus Charter (Source: Trishanty).....	28
Figure 6: Fact sheet TB-DM developed By CTB (Source: Trishanty).....	28
Figure 7: MDR TB enrollment rate in 5 CTB Provinces (October 2014- September 2015) .....	32
Figure 8: PHO Head of Section for Communicable & non Communicable Disease gave opening remarks for EPT Workshop in Central Java (Photo Courtesy of FHI360).....	34
Figure 9: Minister of Health and DG CDC taken picture in CTB-KNCV booth.....	51
Figure 10: Bulletin “ Challenge”.....	52
Figure 11: Two highest ranked article on CTB –Indonesia Social Media.....	52
Figure 12: Final Report of National Tuberculosis Prevelance Survey 2013 (Bahasa).....	56

## List of Abbreviations and Acronyms

AK	<i>Alur Klinis</i> (Clinical Pathway)
APA	Annual plan of action
ART	Anti-retroviral therapy
ATM	AIDS, Tuberculosis, Malaria
ATS	American Thoracic Society
BBLK/ BLK	<i>Balai Besar Laboratorium Kesehatan/Balai Laboratorium Kesehatan</i> (Provincial Health Laboratory)
BPJS	<i>Badan Penyelenggara Jaminan Sosial</i> (National Health Insurance Provider/Agency)
BPOM	<i>Badan Pengawas Obat dan Makanan</i> (National Drug and Food Control Agency)
BPPM	<i>Bina Pelayanan Penunjang Medik</i> (Medical Laboratory Support Services)
BPPSDMK	<i>Badan Pengembangan dan Pemberdayaan Sumber Daya Manusia Kesehatan</i> (The Agency for Development and Empowerment Human Resource of Health)
BSC	Biological safety cabinet
C/DST	Culture/drug sensitivity test(ing)
CBO	Community-based organization
CCM	Country Coordinating Mechanism
CEPAT	Community Empowerment of People Against Tuberculosis
C-GAT	Country GeneXpert Advisory Team
CME	Continuing Medical Education
CPT	Co-trimoxazole Prevention Therapy
CSO	Civil society organization
Ditjen BUK	<i>Direktorat Jenderal Bina Upaya Kesehatan</i> (Directorate General of Health Efforts)
Ditjenpas	<i>Direktorat Jenderal Pemasyarakatan</i> (Directorate General of Corrections)
DM	Diabetes mellitus
DOTS	Directly Observed Treatment – Short Course
EPT	Expert patient trainer
EQA	External quality assurance
FAST	Finding TB case Actively, Separating safely, and Treating effectively
FBO	Faith-based organization
FHI 360	Family Health International 360
FLD	First line drug
GF	Global Fund
GP	General Practitioner
HCW	Health care worker
HDL	Hospital-DOTS linkage
HIV	Human immunodeficiency virus
HRD	Human resources department
IAI	<i>Ikatan Apoteker Indonesia</i> (Indonesian Pharmacists Association)
IC	Infection control
IMA	Indonesian Medical Association
INH	Isoniazide
IPT	Isoniazide Prevention Therapy
ISTC	International Standards for Tuberculosis Care
JATA	Japan Anti Tuberculosis Association
JKN	<i>Jaminan Kesehatan Nasional</i> (National Health Insurance System/Scheme)

KARS	<i>Komite Akreditasi Rumah Sakit</i> (National Committee of Hospital Accreditation)
LMIS	Logistics Management Information System
LQAS	Lot quality assurance sampling system
M&E	Monitoring and evaluation
MDR	Multi-drug resistant
MIFA	Management Information For Action
MoH	Ministry of Health
MSH	Management Sciences for Health
NAP	National AIDS Program
NGO	Non-government organization
NRL	National Reference Laboratory
NSP	National Strategic Plan
NTP	National Tuberculosis Program
NTPS	National TB Prevalence Survey
OR	Operational research
P2PL	Pengendalian Penyakit dan Penyehatan Lingkungan (Department of Disease Control and Environmental Health)
PCA	Patient-centered approach
PDPI	<i>Perhimpunan Dokter Paru Indonesia</i> (Indonesian Pulmonologists Association)
PLHIV	People living with HIV
PMDT	Programmatic Management of Drug-Resistant Tuberculosis
PNPK	<i>Pedoman Nasional Pelayanan Kedokteran</i> (National Guidelines for Medical Practice Standards)
PPK	<i>Pedoman Pelayanan Klinis</i> (Clinical Practice Guidelines)
PPM	Public-private mix
PSM	Procurement supply management
PUSDATIN	<i>Pusat Data dan Informasi</i> (Center for Data and Information)
Puskesmas	<i>Pusat kesehatan masyarakat</i> (Public health center)
QA	Quality assurance
SITT	<i>Sistem Informasi Tuberculosis Terpadu</i> (Integrated TB Information System)
SLD	Second line drug
SOP	Standard operating procedure
SRL	Supranational Reference Laboratory
SSF	Single Stream Funding
SUFA	Strategic Use of ARTs (HIV program priority districts)
TA	Technical assistance
TB	Tuberculosis
TB CAP	Tuberculosis Coalition Assistance Program
TORG	Tuberculosis Operational research Group
UGM	Universitas Gadjah Mada
UHC	Universal health coverage
UI	University of Indonesia
USAID	United State Agency for International Development
WHO	World Health Organization

## 1. Executive Summary

Indonesia is both a high TB and a high HIV burden country, one of top five high TB-burden countries worldwide. The latest National prevalence survey (2013) shows the prevalence was almost 2.5 times higher than previous estimates. The number of prevalent cases is estimated at 1.6 million (0.65% of the general population) with an estimated annual incidence of 1 million cases. Each year around 100,000 people die of TB. MDR-TB prevalence is estimated at around 2% among new cases and 12% among retreatment cases. The HIV epidemic is categorized as a concentrated epidemic in key populations, and a generalized epidemic in Papua Island (2.4% of population).

Challenge TB (CTB) with KNCV as the lead partner and ATS, FHI360, IRD, MSH, and WHO as coalition partners, support the Government of Indonesia through the Ministry of Health in the field of policy and guidelines development, and provision of technical assistance on intervention on areas. Division of responsibilities among CTB partners are as follows: KNCV leads overall implementation and focusses on governance and strengthening of political and financial commitment, enhancing case finding and notification, laboratory network strengthening, PMDT, surveillance, and evidence generation; FHI360 on TB-HIV and TB in prisons; WHO ensures that all policies and guidelines are in line with global guidelines and standards, and integration of TB requirements into the health insurance system; ATS on expansion of PPM, and PMDT cohort review; MSH on eTB Manager; and IRD on eHealth and mHealth.

Based on the lessons learned from TB CARE I, a thorough NSP gap analysis and a review of Global Fund investments, it was agreed to prioritize on the following strategical technical areas:

- Ensuring Universal Access by integrating TB in JKN (*Jaminan Kesehatan Nasional*, National Health Insurance System/Scheme), and securing increased local government funding for TB Increasing case detection;
- Increasing case detection;
- Ensuring the quality of treatment and care for TB, DR-TB, and TB-HIV;
- Expanding diagnostic services;
- Strengthening M&E, surveillance, and operational research.

Through collaborative interventions involving all key players, CTB has achieved the following key results in year 1:

- Four laboratories have successfully passed their EQA panel testing for FL-DST: Microbiology-UGM (Yogyakarta), RS Adam Malik (North Sumatra), RS Rotinsulu (Bandung) and BLK Banjarmasin (South Kalimantan) have all passed their second EQA panel test for FL-DST. This brings the total of laboratories with quality assurance of first-line DST to a total of 13 nation wide; 5 out of 13 have also established SL-DST capacity. This success demonstrates the effectiveness of the CTB and NTP strategy for the development of TB laboratory network capacity for Indonesia. Apart from the successful graduation of the four laboratories above, BBLK Surabaya has showcased their acquired capacity to fully function as NRL for culture & DST in providing technical expertise through on-site intensive training and trouble-shooting. For BLK Banjarmasin, BBLK was the responsible entity for developing the DST capacity, the first time that they have achieved such a result by their 'solo' efforts under CTB supervision.
- With significant support from CTB, the joint TB-HIV Concept Note (CN) for the Global Fund NFM submitted in April 2015 was approved and is currently in the grant agreement negotiation phase.

The CN was based on the epidemiological impact assessment, latest National Prevalence Survey, and the recently developed National Strategic Plan 2015-2019. These documents were the key references for the request for new Global Fund funding. All current in-country CTB partners in Indonesia, supported by external experts funded through CTB, were actively involved in the development of the concept note and underlying strategy. The Global Fund has awarded the full requested allocation amount of US\$ 132.2 million plus US\$ 97.5 million in incentive funding. CTB will continue to support GF coordination and TA within its CTB mandate.

- Provision of support and empowerment of patients' groups expansion, through capacity building training i.e. training on the development of proposal, plan of action, rules and regulation. Related to the empowerment of patients, CTB also provided technical support on the testing of the PCA SOP (Patient Centered Approach SOP) as a tool to appraise health facilities services quality. Up to now, seven (7) patients' groups have been established (PEJABAT in North Sumatra, SEMAR in Central Java, PETA in DKI Jakarta, PANTER and REKAT in East Java, TERJANG in West Java, and KAREBA BAJI in South Sulawesi) with total membership of 102. PETA is now officially registered as an incorporated foundation by the Ministry of Law and Human Rights, Ms Uilly Alawiyah as the PETA chairwoman was invited to share her experiences as MDR-TB patient during the World TB Day 2014 in Washington DC, and Mr Budi Hermawan who was a MDR-TB patient is now a member of the CCM (Country Coordinating Mechanism). Both the organizations and the personnel (Ms Uilly and Mr Budi) now play an important role in the program, through motivating patients and providing input into policy making.
- Mandatory notification has been included in a final draft Decree of the Minister of Health related to TB Control stating that TB is a notifiable disease and that all health providers delivering TB services are obliged to report cases to the National TB Program (NTP). Through regulation enforcement on mandatory notification, it is expected that large numbers of diagnosed TB patients in the private sector (hospitals, private clinics, and individual practitioners) will be captured by the surveillance system. CTB is continuing to advocate for mandatory notification and is currently assisting the NTP in the development of the necessary mechanisms to facilitate notification from all providers (i.e. development of data entry system for private providers linking to SITT).
- In an effort to intensify case finding, several interventions have been undertaken. One of the activities focussed on the TB-Diabetes Mellitus (DM) collaboration. After the pilot project on bi-directional TB-DM screening in North Sumatra, South Sulawesi, and Central Java from October 2014 – February 2015, it has been agreed among NTP, DM and Metabolic Diseases Sub-directorate, and professional organizations to expand the bi-directional screening TB-DM protocol. The end result of the work was the signing of mutual collaboration in form of the TB and DM Governance Consensus Charter by seven (7) professional organizations and Communicable and Non-communicable Disease Directorate of the MoH in August 2015. As the completion, CTB also supported the production of TB-DM IEC materials, i.e. factsheet, and video.
- Provision of technical support and guidance to KPMK-UGM (Center for Health Insurance Management and Costing Policy, Gadjah Mada University) to finalize the TB-JKN (TB National Health Insurance) technical guideline. After being piloted in selected public health facilities in 3 provinces (Lampung, DKI Jakarta, and East Java), the Technical Guideline on TB National Health Insurance was already officially signed and launched by the Disease Control and Environmental Health (P2PL) Directorate General of MoH. The final copies of the guideline have been printed and disseminated throughout the country. The services cost for TB out- and inpatients is now covered under the National Health Insurance. The JKN report on National TB Monev 2014 stated that total of 189,964 cases diagnosed with TB were BPJS members; and the total claim for TB cases in hospitals were 287,66 and 89,458 cases for outpatients and inpatients, respectively. This new health insurance policy is expected to ensure the sustainability of the program. Following on from

this CTB will now focus on monitoring the performance of the system and lobby for increased coverage of PMDT related costs currently not covered in the system. CTB is also lobbying for cost coverage of the public health related costs (e.g. surveillance & prevention).

#### Plans for Year 2:

In year 2, CTB will perform in-depth district assessments in the 10 priority districts and assist the local DINAS and stakeholders in the preparation of district specific and responsive TB control strategies and workplans based on the findings of the assessment and in line with the National Strategic Plan for TB control. Based on the findings and in a participatory manner, CTB will assist the NTP and the provincial and district health authorities to further refine the comprehensive district packages addressing CTB sub-objective 3: patient centred care & treatment, sub-objective 2: comprehensive high quality diagnostics, sub-objective 10: quality data, surveillance and M&E, sub-objective 7: political commitment and leadership, and sub-objective 11: human resource development.

Going forward, CTB will focus on a comprehensive approach based on district-centered service delivery packages integrated across a fewer number of sub-objectives. Upon close consultation with the Mission and partners, it is agreed that the immediate focus of APA2 will be to determine the right size and mix of these district packages. Simultaneously, implementation partners will engage with district and national stakeholders to build support for a sustainability plan once CTB concludes.

The district packages will be built around 8 package components in 6 intervention areas aligned with the five sub-objectives in support of the two priority goals. The draft package structure was already discussed with selected district stakeholders during a series of field visits in August, and input from these visits is still being incorporated. Prior to commencing new activities, it will be essential to design a situational epidemiological and program assessment tool to collect adequate baseline data for each of the 10 intensified districts. These data must be aligned with the proposed package components.

The 8 package components are as follows:

1. Case detection through quality assured bacteriology
2. Intensified case finding (including screening of priority risk groups)
3. Standardized treatment with supervision and treatment monitoring
4. PMDT
5. Health systems strengthening (governance to build political commitment and leadership and sustainability)
6. Engaging all providers (Public Private Mix – PPM)
7. Health information strengthening (to ensure quality data, surveillance and M&E)
8. Human resource development

## 2. Introduction

Indonesia is the largest archipelago in the world with an estimated 17,500 islands and more than 250 million people. The country consists of 34 provinces, each with a governor and legislature. Provinces are composed of districts/municipalities (416/98), responsible for government services.

Indonesia is both a high TB and a high HIV burden country. Indonesia has the fastest growing HIV epidemic in the region with an estimated national prevalence of 0.4% (2013). In most provinces, the HIV epidemic is concentrated, except in Papua. The total number of tuberculosis cases notified in 2013 was 327,103 the fourth highest number for all countries, after India, China and South Africa.

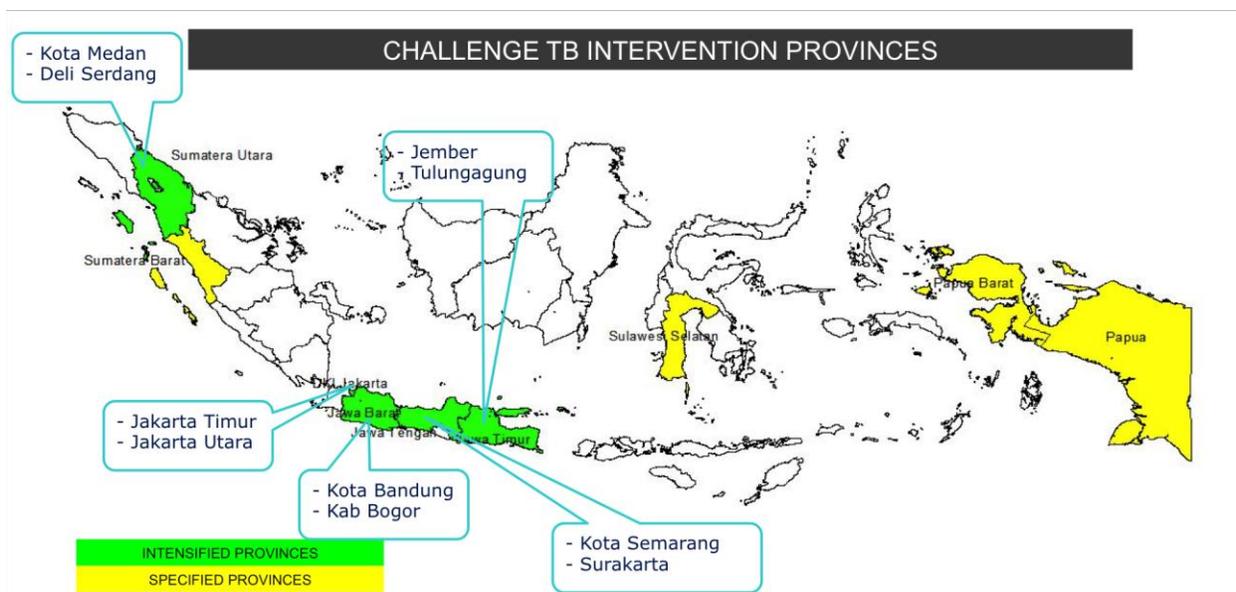
The epidemic of TB in Indonesia is generalized and affects all groups and ages. Though the recent TB prevalence survey shows a downward trend, the prevalence was almost 2.5 times higher than previous estimates suggested (average 660/100.000 population). The number of prevalent cases is estimated at 1.6 million (0.65% of the general population) with an estimated annual incidence of 1 million cases. Each year around 100,000 people are assumed to die of TB in the country.

Based on the National TB Strategic Plan 2015-2019 gap analysis and lessons learned from TB CARE I, CTB has **prioritized five technical intervention areas:**

1. Ensuring Universal Access by integrating TB in JKN, and securing increased local government funding for TB
2. Increasing case detection,
3. Ensuring the quality of treatment and care for TB, DR-TB, and TB-HIV,
4. Expanding diagnostic services,
5. Strengthening M&E, surveillance and operational research

CTB interventions in Indonesia are implemented through KNCV with assistance from two in-country coalition partners (FHI360 for TB-HIV and prisons, and WHO for national level policy and guidelines). KNCV is also supported, where needed, by short-term technical assistance from three external coalition partners ATS (expansion of PPM, ICF, and cohort review PMDT), MSH (eTB Manager), and IRD (eHealth and mHealth).

CTB focusses on five priority provinces, selected on the following criteria: a) Large provinces prioritized by NTP with high burden of TB and HIV; b) USAID Indonesia priority provinces as indicated in the 2014-2019 Cooperative Development Country Strategy (CDCS); c) building on work done to date; d) presence of other USAID partners to increase synergy.



**Figure 1. Challenge TB Geographic Areas**

In order to define sustainable solutions and best models for expansion, CTB implemented small scale interventions and scale up at the district level in the five priority provinces through an “intensified” package of TA. The aim is to create workable/ scalable intervention models based on best practices. In these priority provinces, CTB supports all five (5) technical intervention areas (detailed above). In the first two years, CTB has selected 10 districts in these “intensified” provinces (2 districts per province). See below the profiles of 10 intensified districts (Table 1).

**Table 1: Profile of 10 Intensified Districts**

Province	District/ Municipality	Population (2014)	Number of all cases notified (2014)	Case Notification Rate (2014)	Cummulative number of PLHIV up to and including 2014	Cummulative number of AIDS patients up to and including 2014	Number of Primary Health Facilities (Puskemas)	Number of (public/ private) hospitals providing DOTS for TB	Number of Xpert machines	PMDT sites
North Sumatera	Deli Serdang	1,984,598	2,886	145	598	514	34	23 (1/22)	0	-
	Medan City	2,185,789	5,858	268	1,467	2,299	39	76 (8/68)	1	Referral: RS Adam Malik
DKI Jakarta	East Jakarta	2,735,944	6,293	230	NA	NA	86	43 (15/28)	2	Referral: RS Persahabatan
	North Jakarta	1,711,036	2,825	165	NA	NA	49	24 (5/19)	1	-
West Java	Bandung City	2,575,478	7,086	275	4282	1,750	73	29 (9/20)	2	Referral: RS Hasan Sadikin Bandung Sub-referral: RS Rotinsulu & Lung

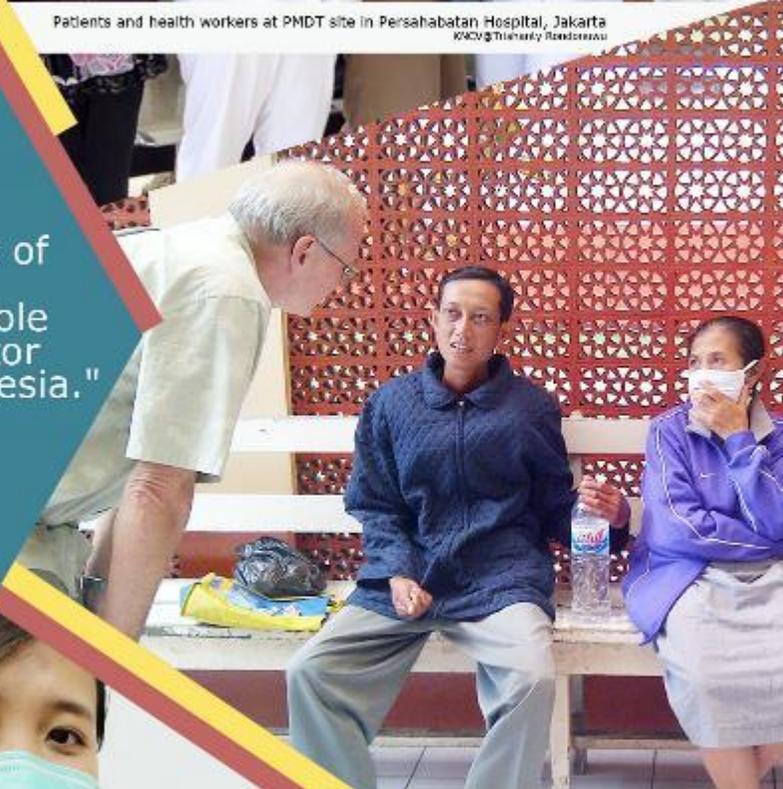
Province	District/ Municipality	Population (2014)	Number of all cases notified (2014)	Case Notification Rate (2014)	Cummulative number of PLHIV up to and including 2014	Cummulative number of AIDS patients up to and including 2014	Number of Primary Health Facilities (Puskesmas)	Number of (public/ private) hospitals providing DOTS for TB	Number of Xpert machines	PMDT sites
										Clinic Bandung
	Bogor	5,111,769	7,738	151	290	229	101	21 (6/15)	1	Sub-referral: RSP Gunawan
Central Java	Surakarta City	510,077	1,447	284	432	247	17	14 (4/10)	1	Referral: RS Moewardi
	Semarang City	1,761,414	2,486	141	1,001	453	37	20 (7/13)	1	Sub Referral: RSUP Karyadi
East Java	Tulung Agung	1,018,341	819	80	1,030	734	31	12 (2/10)	0	-
	Jember	2,362,179	3,139	133	1,925	749	49	12 (5/7)	0	Sub-referral: RSP Jember
<b>TOTAL</b>			40,577	Avg. 185			724	274 (62/212)	9	4 Referral & 5 Sub-referral Hospitals

Additionally CTB provides technical support to four (4) other provinces (Papua, West Papua, West Sumatra, and South Sulawesi), which focuses on the expansion and quality assurance of essential components of TB control. Local health services and partners in these provinces received a **“specified package”** of technical assistance limited to lab strengthening, PPM, PMDT, TB-HIV and surveillance, where needed based on local area specific planning.



Patients and health workers at PMDT site in Persahabatan Hospital, Jakarta  
KNCV@Tuberculosis Indonesia

"One of the efforts of Challenge TB is to strengthen the role of the private sector and hospital in Indonesia."  
-Jan Voskens-



Mr. Jan Voskens is listening to ex TB patients stories in Saiful Anwar Hospital, Malang  
KNCV@Ayu Hastuti Pratiwiyanti



KNCV Technical Officer, Novia Rachmayanti is showing a GeneXpert's cartridge in Microbiology Laboratory of University Indonesia  
KNCV@Tuberculosis Indonesia

### 3. Country Achievements by Objective/Sub-Objective

#### Objective 1. Improved Access

##### Sub-objective 1. Enabling environment

In order to support the implementation of TB program in Indonesia to achieve its targets, we need to ensure an enabling environment that addresses legal, policy, organizational, fiscal, and information gaps.

In the first year of the program, CTB provided technical support to:

- ⇒ Assist the NTP in development and implementation of mandatory notification.
- ⇒ Develop quality assurance tools for all service providers (public & private) at all levels, and the associated accreditation tools (for hospitals) and certification tools for GPs under IDI.
- ⇒ Link all of the regulatory approaches to the national health insurance requirements and processes
- ⇒ Strengthen the coordination structure for PPM at district level through District PPM Teams to facilitate engagement of stakeholders and providers at district level.

Besides that, CTB provided support for patients' involvement and empowerment, such as patients' group expansion, capacity development, and initiation of patient group networking. To endorse community involvement in supporting the improvement of health services quality, CTB provided technical support to finalize the PCA (Patient Centered Approach) SOP.

To implement SO 1, CTB worked collaboratively with several key partners, such as Directorate General of CDC, Directorate General of Medical Service, professional organizations, P2JK (center for health finance and insurance) and BPJS (national health insurance management board).

#### **Key Results**

##### i. **Mandatory Notifications has been included into the Minister of Health Decree**

Results from the Indonesia Prevalence Survey 2013 showed that only 1/3 TB cases have been notified (327,103 notified cases in 2013 vs. an estimated NPS incidence of 1 million cases per year). It showed that there is still a lot of cases not recorded or reported by service providers to NTP. Mandatory notification is one of the regulatory/ legal enforcement efforts to oblige all health service providers to report TB cases. CTB provided technical support to create the regulatory framework to enable enforcement of the mandatory notification regulation.

Mandatory notification has been agreed to become one section of the Ministerial Decree draft related to TB, to be stated that TB is a notifiable disease and all TB service providers have to report TB cases to NTP. The target is that the decree will be signed by Minister of Health by end of 2015.

To further support the implementation of mandatory notification, CTB initiated the development of m-health, as a user-friendly recording and reporting system. Coordination meetings have been conducted with NTP and stakeholders to review the existing recording and reporting system (SITT and eTB manager) and to narrow down the data set for mandatory notification system. As the result, the draft of dataset has been developed and will be reviewed by NTP. CTB plans to

facilitate a workshop with private practitioners in November 2015 to get their inputs on the dataset (content and realistic Volume of data to include).

ii. **TB Service Technical Guideline for Public Health Center Accreditation developed**

One effort to standardize TB services in public health centers (Puskesmas) is by integrating TB into the Puskesmas' accreditation system<sup>1</sup>. Puskesmas accreditation has been launched by the Minister of Health through the Minister Decree number 75/2014. NTP, Indonesia Association of Internists (PAPDI), and Pulmonologist (PDPI) supported by CTB have developed the draft of TB Service Technical Guideline for Public Health Center Accreditation since June 2015. This guideline is intended to provide Puskesmas accreditation assessors with a tool to measure TB service performance in Puskesmas. Furthermore, Puskesmas can use this guideline to prepare themselves to meet accreditation standards for TB services. We expect that by end of 2015, the draft of TB Service Technical Guideline for Public Health Center Accreditation will be finalized.

iii. **Pulmonologists and General Practitioners' involvement in TB care**

Recognising the important role of private sector engagement, CTB worked with the Indonesia Medical Association/IMA (IDI) and its subsections (pulmonologists, internal medicine specialists and paediatricians). The Indonesian Society of Respiratory (PDPI) developed a Public-Private Mix (PPM) project under TB CARE I to engage private providers (pulmonologists) in the national TB control program, by following standards in the International Standards of Tuberculosis Care (ISTC). These standards as well as the national TB program guidelines are the first step to introduce certification of private TB service providers and thus creating a framework for their engagement with the NTP, standardization and quality assurance of service provision and mandatory notification. To date 97 pulmonologists and 61 private hospitals (111 doctors' practices) in 3 provinces are involved in this project. The project was expanded with Global Fund resource to private providers in Sumatera Utara (Medan), Sumatera Barat (Padang), Jawa Tengah (Solo), Jawa Barat (Bogor), Jawa Timur (Surabaya, Malang). For long-term sustainability ATS recommended the development of a business model for the PDPI PPM model.

The technical Guideline for GPs Certification has been disseminated since its issuance in 2014. To find the best model for GPs certification implementation, CTB and IMA/IDI have agreed to begin GPs certification in 10 CTB districts, starting with GPs who are the Social Security (BPJS) registered TB service provider and have attended TB training. The process is by monitoring TB management in his/her workplace by PPM team and IMA/IDI branch.

In CTB areas, the program contributed to the engagement of GPs in TB program activities through following the approaches:

- ⇒ West Java: On the Job Training on DOTS for 140 private practitioners.
- ⇒ West Sumatra: Establishment of TB Collaborative Agreements between 29 GPs/ clinics and the PHC
- ⇒ DKI Jakarta: On the Job Training on DOTS for 76 GPs
- ⇒ East Java: TB Socialization in National Health Insurance training organised by the DINAS to 108 GPs and Dentists

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<sup>1</sup> Puskesmas accreditation is the recognition to Puskesmas given by an independent accreditation institution appointed by Minister of Health to appraise Puskesmas' services according to the standard of services as regulated by the Ministry of Health to improve the quality of services sustainably. (Minister of Health Decree No 75/2014)

Furthermore, the NTP, the Agency for Development and Empowerment Human Resource of Health (BPPSDMK-MoH), and IMA/IDI collaborated to develop TB distance learning for General Practitioners. The Minister of Health planned to launch the program in October 2015 with a targeted first batch of 100 participating GPs. Meanwhile, until 15 October, 621 had applied to be participants. CTB supported NTP in participant selection based on agreed criteria (e.g. BPJS registration for TB services, case load, willingness to engage and report, etc.) from 10 intensified districts, in order to further follow up after the training.

iv. **Involvement of Indonesian Pharmacist Association (IAI)**

Pharmacists play a key role in the TB control program, since they ensure that the prescriptions are in line with TB program standards. Coordination and IAI involvement as the professional organization with 40,000 members nationwide has been initiated. The result was that the IAI agreed to endorse the involvement of its member in 10 CTB districts. Then, CTB together with NTP and IAI have developed the Pharmacists Practices Technical Guideline for TB Patient Services as the reference for pharmacists regarding to TB drug services. While, the model for IAI involvement is still under discussion, it is expected to be finalized before end of 2015.

v. **PPM Operational Guideline and Assessment tools for Primary and Referral Health care were revised**

One approach to improve the TB program, starting from case finding until recovery, is through collaborative work between government and private sectors through the PPM (Public Private Mix) approach. By having a National Health Insurance scheme, and also current situation of referral networking system, there is a need to develop PPM Operational Guidelines, which explains the all steps of PPM from implementation to monitoring and evaluation. This operational guideline will become the reference especially for CTB TOs in implementing PPM models and engaging private providers at districts and sub-districts level. The guideline has been finalized and is now being reviewed by the NTP, before being adopted as the national guideline.

Aside from the PPM Operational Guideline, the other substantial tools, which are being developed/ finalized is the FKTP (Primary Health Service providers) and FKRTL (Advance Reference Health Service providers) comprehensive assessment tools, aiming to standardize the TB services management. These comprehensive assessment tools comprise of 10 assessment items for FKRTL and 5 items for FKTP. The FKRTL tool has been piloted in 4 hospitals in DKI Jakarta, and the FKTP tool in 3 DPM (private general practitioners) in West Java.

vi. **National Guideline for Medical Practice Standard (*PNPK-Pedoman Nasional Pelayanan Kedokteran*) 2nd edition was drafted**

The aim of PNPk (Medical Services National Guideline) is to become the reference for TB practitioners based on scientific evidences and to provide recommendations to hospitals and decision makers in the development of local protocols and/ or clinical practices guidelines. TB CARE I supported the development of its first edition (2013). Now the PNPk needs revising in line with the revision of the International Standards for Tuberculosis Care (3<sup>rd</sup> edition), which were published during the celebration of World TB Day 2014.

CTB (KNCV, WHO, FHI) works collaboratively with professional organizations, MoH (Medical Services/ *Bina Upaya Kesehatan* and NTP) in developing the new edition of PNPk. With the facilitation from CTB, the draft of its second edition is now in progress. It's expected that by end of 2015, the second edition of PNPk can be finalized and ready for dissemination.

vii. **The National Health Insurance (NHI/JKN) Guideline for TB services was Finalized**

The National Health Insurance (JKN) has been launched on January 1<sup>st</sup>, 2014. TB CARE I provided support to NTP to ensure that TB service cost has been included in the JKN mechanism. This is very important to ensure the long-term sustainability of the TB program, especially related to service cost that otherwise has to be paid by patients. KPMAC-UGM as Sub Recipient to the NTP together with TB CARE I, MoH BPJS, and D.I. Yogyakarta Office of Health developed the TB Services Technical Guideline. In progress of finalization, KPMAC-UGM has been piloted it in selected public health services in 3 provinces (Lampung, DKI Jakarta, and East Java). In 2015, that technical guideline has been finalized during the coordination meeting between KPMAC-UGM with stakeholders, i.e. MoH (BUK and NTP), CTB, and BPJS. It was officially signed by P2PL Director General of MoH.



**Figure 2: National Health Insurance Guideline for TB**

The first year report of The Social Security Provider (*Badan Penyelenggara Jaminan Sosial/ BPJS*) showed a high utilization of National Health Insurance for TB. Between January-November 2014 there were 356,304 cases diagnosed with TB (305,854 outpatients and 50,450 inpatients).<sup>2</sup>

viii. **Patient Group Expanded and Empowered**

Since 2013 under TB CARE I, the effort to increase MDR-TB enrollment has been initiated by involving ex- and bacteriologically converted MDR-TB patients as their peer educators. The peer educator group was established to provide psychosocial support to MDR-TB patients to build their motivation to complete the medication until cured. This approach showed good results with 121/160 (76%) patients receiving home visits for psycho-social support continuing on treatment between October 2014 – September 2015.

CTB continues its supports on the expansion of patient groups, activities facilitation, and organizational or personal capacity development for its members. In this year one new patient group has been established in North Sumatra, named PEJABAT, which brings the total number of patient groups to 7 (PEJABAT in North Sumatra, SEMAR in Central Java, PETA in DKI Jakarta, PANTER and REKAT in East Java, KAREBA BAJI in South Sulawesi, and TERJANG) with a total membership of 102. Organizational capacity building was provided through training on development of proposals, plans of action, rules and regulations, which has been attended by 5 patient groups (PETA, SEMAR, PEJABAT, PANTER, and KAREBA BAJI), and 3 of them (KAREBA BAJI, PETA, and PANTER) were subsequently able to develop plan of action and budget.

Other achievements related to patient empowerment were:

- ⇒ PETA (Jakarta) and REKAT (Surabaya, East Java) have officially registered as an incorporated foundation with the Ministry of Law and Human Rights; Kareba Baji (South Sulawesi) and PANTER (Malang, East Java) is in notary process.
- ⇒ Ms Uly Alawiyah, PETA Chairwoman, spoke in Washington DC during World TB Day 2014 to share her experiences as MDR-TB patient. It inspired people that MDR-TB is a curable disease and family support also plays a very important role during treatment.

<sup>2</sup> Source: BPJS presentation in Monev TB, January 2015

⇒ Mr Budi (member of PETA) was appointed as the member of CCM (Country Coordinating Mechanism) since 24 February 2015. The CCM is the central hub of Global Fund's commitment to localize the ownership and participatory decision making.

Table 2 below shows progress of patient groups which were initiated under TB CARE I and later CTB, which currently also collaborate with other CSO and GF as peer educators, motivators for TB regular/ MDR TB patients, and patient investigation.

**Table 2: Patient group collaboration with other CSO**

Name of Patient groups/ Peer Educator (PE)	CSO in collaboration, and Patient group role	Cooperation format
PETA (Jakarta)	<b>LKNU CEPAT</b> PE provide psycho-social support to TB regular patients; patient tracking	Sub grant
PANTER (Surabaya, East Java)	<b>Aisyiyah</b> PE provide psycho-social support to TB regular patients	Staff temporer/ contract
REKAT (Malang, East Java)	<b>- Aisyiyah</b> PE provide psycho social support to MDR-TB patients <b>- GF</b> PE provide psycho social support to MDR-TB patients	Staff temporer/ contract
PEJABAT (Medan, North Sumatera)	<b>Aisyiyah</b> PE provide psycho social support to MDR-TB patients and manage MDR-TB patient's shelter	Staff temporer/ contract

ix. **Pilot testing of Standard Operational Procedure (SOP) for Patient Centered Approach (PCA) finalized.**

One of the efforts to ensure TB services quality in health facilities level is by involving the community as a "citizen control" using the PCA tool, which is adopted from TB CARE I. Two instruments being adopted from the PCA tool are KUPAS TB (Services Quality from Patients' Point of View) and PHKP TB (Patients' Rights and Obligations Guidance). KUPAS TB is an instrument for patients to appraise the quality of TB services, i.e. waiting time, services time, medicine availability, etc. PHKP TB is an instrument to improve patients' knowledge regarding to their rights and obligations with the aim to improve the relationship between patients and health care workers/ doctors. In order to implement both PCA instruments nationally, the pilot has been initiated in three (3) provinces (West Sumatra, DKI Jakarta and East Java) involving MoH, PHO, DHO, Hospitals, PHC, and cadres from local CSO. The results from the pilot provided feedback for the PCA SOP improvement to be more user-friendly for the local CSOs.

#	Performance (Output & Outcome) Indicators	Indicator Definition	Baseline (Year/ timeframe)	Target	Result
				Y1	Y1

<b>1.1.1.</b>	% of notified TB cases, all forms, contributed by non-NTP providers (i.e. private/non-governmental facilities)	<p>Description: Proportion of TB cases (all forms) reported by non-NTP providers (i.e. private/non-governmental facilities)</p> <p>Indicator Value: Percent</p> <p>Level: National and Challenge TB geographic areas</p> <p>Numerator: Number of all TB cases (bacteriologically confirmed + clinically diagnosed; includes new &amp; relapse cases) reported by non-NTP providers in the past year. Denominator: Total number of TB cases (bacteriologically confirmed + clinically diagnosed; includes new &amp; relapse cases) reported by both NTP and non-NTP providers in the past year</p>	National: 27% in 2014  Consist of Non- NTP public: 18% (57,586/ 322,806) and non-NTP private: 9% (28,186/ 322,806).	20% (National Strategy)	N/A
			<p>CTB areas (10 districts, 2014): 44%</p> <p>consist of 26% (10,553/ 40,557) non NTP public and 18% (7,136/ 40,557) non NTP private</p>	45%	<p>CTB areas (10 districts, 2015): 46% (8,764/ 19,193)</p> <p>Data available up to June 2015</p>
<b>1.1.2.</b>	% of case-reporting private providers that also provide treatment outcomes for TB patients	<p>Description: Proportion of case-reporting private providers that also provide treatment outcomes for TB patients</p> <p>Indicator Value: Percent</p> <p>Level: National and Challenge TB geographic areas</p> <p>Numerator: Number of case -reporting private providers that also provide treatment outcomes for TB patients</p>	Unavailable	Unavailable	CTB Areas (10 districts): 100% (160/160)

		Denominator: Total number of case-reporting private providers in the area			
1.2.1.	# of current/ex-TB patient groups engaged at the community level and also linked with the NTP	Description: Number of current/ex-TB patient groups engaged at the community level and also linked with the NTP  Indicator Value: Number  Level: National and Challenge TB geographic areas  Numerator: Number of current/ex-TB patient groups engaged at the community level and also linked with the NTP	5	6	CTB Areas (5 provinces): 6 patient groups

## Sub-objective 2. Comprehensive, high quality diagnostics

Despite improved capacity of the MoH's Directorate of Laboratory Services (BPPM) to provide national leadership, further support is necessary. The National Strategic Plan (NSP) for Laboratory Network Development 2015-2019 defines policy direction. CTB will use the document as guidance; the focus for year 1 was to finalize and begin implementation of the NSP for Lab Network Development. CTB strategic approaches are to improve capacity of NRL, improve EQA system, expand the network and improve the capacity of IRLs, introduce LED microscopy, and engage the private laboratory network, development and implementation of a Laboratory Quality Management System (LQMS), starting with a baseline needs assessment and integration of LQMS into three NRLs and other selected reference laboratories, strengthen NRL-molecular diagnostics especially in Xpert capacity expansion, EQA provision, adaptation from USAID-DELIVER piloting for a sputum transfer mechanism, and provide support to NRL-C/DST to conduct laboratory biosafety training.

### Key Results

#### i. Lab C/DST Certified

Microbiology-UGM (Yogyakarta), RS Adam Malik (North Sumatra), RS Rotinsulu (Bandung) and BLK Banjarmasin (South Kalimantan) have all passed their second EQA panel test for FL-DST. Thus four (4) laboratories have been successful in EQA panel testing in APA1, bringing the national total number of laboratories with quality assurance of first-line DST to 13<sup>3</sup>; 5 (BBLK Surabaya, Mikro UI, RSP Jakarta, BLK Bandung, HUMRC-Makassar) out of the 13 have also achieved second-DST capacity. This confirms that CTB and NTP have been on the right track in developing the laboratory network capacity for Indonesia. These results were only possible

<sup>3</sup>5 laboratories: BBLK Surabaya, Mikro UI, RSP Jakarta, BLK Bandung, HUMRC-Makassar certified for first and second line drug sensitivity test; 8 laboratories: BLK Semarang, BBLK Jakarta, RS Adam Malik, BLK Jayapura, BBLK Palembang, Mikro UGM, RS Rotinsulu, BLK Banjarmasin certified for first line drug sensitivity test

through the excellent work of BBLK Surabaya in providing technical expertise through on-site intensive training and trouble-shooting, showcasing that they have now fully graduated to functional and capable NRL status for culture & DST. For BLK Banjarmasin, the BBLK was the responsible entity for developing the DST capacity, the first time that they have achieved such a result by their 'solo' efforts.

ii. **National action plan for Laboratorium has been drafted.**

CTB provided TA and an external consultant, Richard Lumb from SRL Adelaide, to develop the National Action Plan for Laboratory 2015-2019. This document is developed in alignment with the National Development Policy 2015-2019, the Ministry of Health Strategic Plan 2015-2019, and Global and Regional Strategy. The plan will serve as a guide to coordinate actions of all stake holders, central and regional government, civil society organization, National Integrated Movement for TB, TB expert comitee, and international partners to achieve the overall vision of the national TB program "Towards a Health, Independent, Equitable Community Free From TB". It consists of TB laboratory networking, external quality assurance (EQA), and TB laboratory development of microscopic examination, culture and drug susceptibility test (C/DST) culture, and rapid TB diagnostic development in 2015-2019 periode. To date, the draft over 70% complete and it is expected to be finalized in November 2015.

iii. **Challenge TB has introduced another innovative technology, LED microscopy (Light-Emitting Diode Fluorescence Microscopy/ LED FM) in Indonesia.**

Three LED FMs have been procured and sent to the National Reference Lab (NRL) Microscopy (BLK Bandung) in June 2015. Vendors have trained five laboratory technicians on LED utilization at the NRL as part of procurement service. All trainees were women. The final draft of the Standard Operation Procedures (SOP) for LED FMs has been developed. Piloting of LED utilization is being conducted in BLK Bandung, Rotinsulu Hospital, and Hasan Sadikin Hospital. The selection criteria were based upon workload, availability of human resources who had been trained for TB microscopy, availability of supervisor, and reachability to be supervised. It is intended to gather a lesson learned, which also will provide the necessary inputs for the SOP, EQA mechanism, and technical guideline finalization. SOPs for LED Microscopy implementation including EQA (External Quality Assurance) have been developed and are under review at national level. Guidelines and SOP have been finalized and are in progress of poster and booklet design. The EQA mechanism will be provided after inputs from lessons learned during trial are gathered.

iv. **Panel test for microscopy provided to 18 provinces**

As requested by NTP, CTB supported panel test for 18 provinces (North Sumatera, West Sumatera, Special capital region of Jakarta, Yogyakarta Special Region, Central Java, East Java, Banten, South Sulawesi, Papua, West Java, Jambi, Bengkulu, West Kalimantan, Central Kalimantan, West Sulawesi, North Maluku, and West Papua) and the rest of provinces (16) were supported by GF. In the first cycle, one lab (BLK Jayapura in Papua) out of 18 did not pass the test. Results of the second cycle were expected to be accepted at the end of September 2015. The evaluation is conducted by the NRL microscopy.

v. **GeneXpert Expansion and Utilization**

The National TB Control Program initiated using GeneXpert machines since February 2012 with 17 machines procured with funding from TB CARE I. In Q3 2013, 24 GeneXpert machines were procured through GF funding which brings the number of GeneXpert machine in country to 41, placed in 28 provinces. In 2013 through the TB REACH project, in order to improve TB case

finding, an additional 25 GeneXpert machines were installed in clinics and hospitals in Jakarta bringing the grant total to 66.

In order to expand the access to and utilization of rapid diagnostic tools, the NTP plans to procure new Xpert machines. It has been decided through coordination with NTP, CTB, BPPM, BUKD, and NRL, that additional GeneXpert machines will be placed in 42 sites in two phases; in 22 sites during Phase 1 (September 2015) and in 20 sites during Phase 2 (November 2015). CTB provided TA on Xpert placement with criterias of Xpert site selection, i.e.: commitment of providers, infrastructure readiness, SUFA/non SUFA district (to support TB-HIV), PMDT referral hospital/non PMDT referral hospital. Twenty-two (22) Xpert machines have arrived as planned in September 2015. A workshop for Xpert placement preparation will be conducted in October 2015 and followed with installation at the selected sites.

The average of Xpert utilization in 9 CTB provinces within the last 2 years (October 2013-September 2014) to (October 2014-September 2015) increased, from 2,571 to 3,051. The average of percentage of unsuccessful test decreased from 6.6% to 4.6%, which described the Xperts' maintenance was manageable with good capacity of lab staffs.

No supervisory visits to GeneXpert sites were conducted since October 2014. 42 sites have completed self-assessment and 6 problematic sites were contacted for discussion and trouble shooting. The current central supervision model is at its limit and needs to be rolled out to a province-based system. There is limited to no contact with the local service provider (MedQuest) and many sites have reported defect modules without receiving support or a response from the service provider.

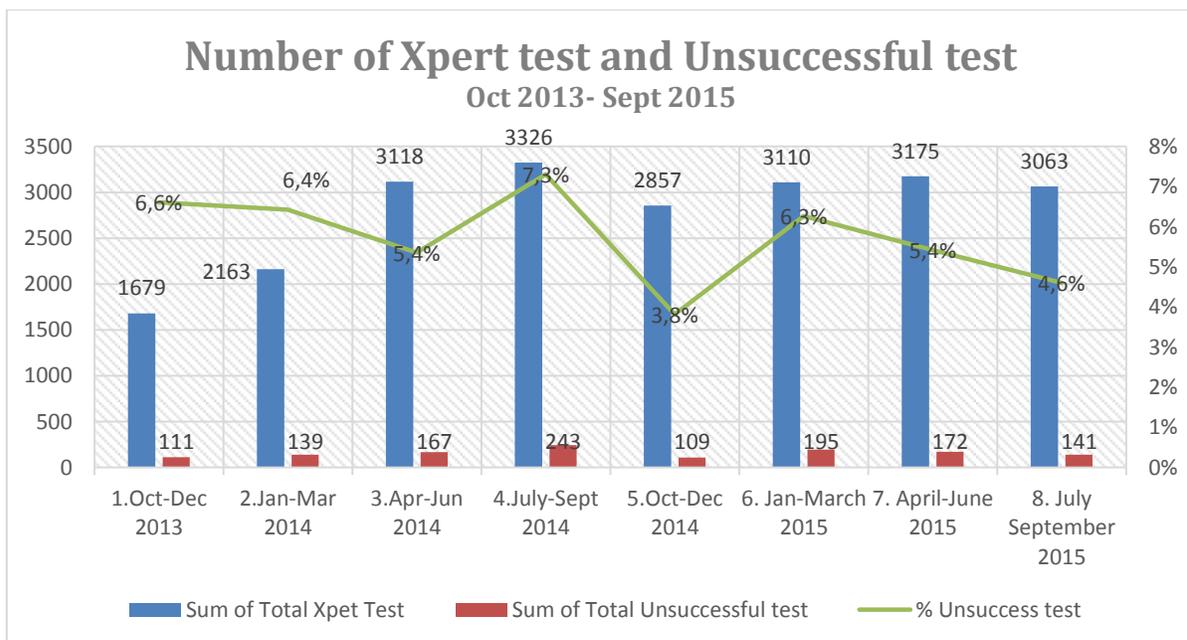


Figure 3. Number of Xpert test and Unsuccessfull test

vi. **Finalization of National Guideline for Xpert**

CTB provided support to NTP to ensure the standard and quality of services on Xpert lab is maintained by developing National Xpert Guidelines, i.e Operational Guideline for TB diagnosed using Xpert machines and Technical



Figure 4: National Guidelines for Xpert

Guideline for Xpert Utilization. These documents are essential for Hospitals and Laboratories where Xpert had been placed with guidance from installation process until how to read the Xpert report and reporting the results.

vii. **Piloting eTB12 at CTB areas**

In order to support microscopic examination, NTP initiates TB-12 electronic (e-TB 12) to strengthen recording and reporting of EQA with LQAS method. It was an electronic/-computerized version of the TB 12 form, which is an MS Excel based form. eTB 12 was piloted in Central Java province, which involved the PHO, DHO TB staff and referral laboratories. From the pilot project, it was identified that some algorithm on the software needed to be revised. CTB provided TA to ensure the algorithm has been corrected, and recommend dissemination of eTB 12 conducted after the eTB 12 algorithm has been revised. CTB is also supporting the introduction of GX alert and the initial visit of the HIS consultant for the introduction and system integration of GX alert was conducted. During the visit, a total revision of the HIS system was proposed by the NTP. The new system is expected to link and integrate (in a modular concept) all health information systems currently used in TB (including lab EQA and logistics) The next visit is expected in October.

viii. **Piloting of specimen transport system.**

CTB provided TA on piloting of specimen transport systems, which is conducted by JSI (John Snow Inc.). This pilot project was conducted in 9 provinces and 16 districts. The selection criteria were based upon the number of suspects, strategic use of ART's (SUFA) activities implementation, and TB program in place in prison. In this APA1, CTB participated in the coordination meeting on April 16-17, 2015 in Semarang, Central Java (facilitated by JSI). Preliminary findings of the pilot project show that the benefits of specimen transport were that all the specimens were transported the same day; no loss of specimen, broken box or leaked specimen; empty boxes are being returned in time, no shortage was observed; JSI is confident that outsourcing could work easily but have to ascertain this at Province/District level. And the challenges were to ensure the (timely) return of test reports, requiring a better and reliable mechanism of quick reporting; low numbers of request received for transportation; some provinces/districts could not even start. To ensure the sustainability, it was recommended to decentralize to province and try local alternative couriers. The pilot is expected to close and be evaluated in September 2016

ix. **NRL Strengthening**

CTB provided an external consultant, Richard Lumb to strengthen capacity of NRLs. Supervision and mentoring visits were conducted to review progress of all 3 NRLs (Microbiology UI, BLK Bandung, BBLK Surabaya) to enable them to fulfill their respective roles and provide advice for improvements. Furthermore, supervision visits and on-site assessments were conducted to four (4) laboratories together with the external consultant. They were Sanglah Hospital to assess safe working practices and technical conduct of TB culture and first-line drug susceptibility testing; BLK Semarang to review culture/DST activities; Saiful Anwar Hospital to do assessment as part of culture laboratory expansion; and BP4 Lubuk Alung to review the conceptual design of its lab. The roadmap and linkage for further expansion and organization of the reference laboratory network for all levels from health facility to NRL are outlined in the draft national laboratory action plan.

x. **Maintenance of biological safety cabinets (BSC)**

CTB provided support for calibration of 15 BSCs in 8 laboratories in May-June 2015. These laboratories were Persahabatan Hospital, Adam Malik Hospital, BLK Bandung, Rotinsulu Hospital, BBLK Palembang, BLK Semarang, Mikrobiologi UGM and BLK Papua.

#	Outcome Indicators	Indicator Definition	Baseline (Year/ timeframe)	Target	Result
				Y1	Y1
2.1.2.	A current national TB laboratory operational plan exists and is used to prioritize, plan and implement interventions.	Description: This indicator measures whether or not a country has a defined TB laboratory operational plan (work plan) within the larger National TB Strategic Plan or National Laboratory Strategic Plan. The country and partners use the operational plan to design and implement priority activities to strengthen TB diagnostic services and the network for TB control. Indicator Value: Score based on the following: 0= Operational plan not available 1= Operational plan available 2= Operational plan available and follows standard technical and management principles of a quality work plan required for implementing the necessary interventions to build and strengthen the existing TB laboratory network (reference: "Practical Handbook for National TB Laboratory Strategic Plan Development"; <a href="http://www.stoptb.org/wg/gli/assets/documents/Lab_Strategic_Handbook.pdf">http://www.stoptb.org/wg/gli/assets/documents/Lab_Strategic_Handbook.pdf</a> ) 3= Operational plan available and meets annual implementation targets	No or 0 (2014)	1	National: 0
2.2.2.	#/% of laboratories showing adequate performance in external quality assurance for smear microscopy	Description: Performance of EQA is just as important as having EQA established. This indicator measures the percent of laboratories enrolled in EQA for smear microscopy that successfully passed EQA in the last reporting period. Indicator Value: Percent Level: National and Challenge TB geographic areas Numerator: Number of laboratories that successfully passed EQA for smear microscopy Denominator: Total number of laboratories enrolled in EQA for smear microscopy	71% (146/207). Data available in 7 districts (plus Medan City and Deli Serdang) National: 80% (8/10)	80% (TB National Guideline 2014)	CTB areas 2015 (10 districts): 78% (111/142)  PME conducted only in 5 districts (Bandung City, Bogor, East Jakarta, Tulungagung, Jember). Data available up to June 2015
2.2.4.	#/% of laboratories showing adequate performance in external quality assurance for DST	Description: Performance of EQA is just as important as having EQA established. This indicator measures the percent of laboratories enrolled in EQA for culture/DST that successfully passed EQA in the last reporting period. Indicator Value: Percent Level: National and Challenge TB geographic areas Numerator: Number of laboratories that successfully passed EQA for culture/DST Denominator: Total number of all laboratories	National: 80% (8/10) (year?)  CTB Areas (5 provinces): 62% (5/8) (year?)	100%	National 2015: 100% (13/13)  CTB Areas 2015 (5 Prov.): 100% (8/8)

		enrolled in EQA for culture/DST			
<b>2.3.1.</b>	Percent of bacteriologically confirmed TB cases who are tested for drug resistance with a recorded result.	Description: This indicator measures the percentage of bacteriologically confirmed TB cases that are tested for drug resistance and also have results recorded in the TB register (disaggregated by new and previously treated cases). Drug resistance testing includes phenotypic (culture DST) and genotypic (molecular DST by GeneXpert, LPA or other molecular technologies). Indicator Value: Percent Level: National and Challenge TB geographic areas Numerator: Number of bacteriologically confirmed TB cases that are tested for drug resistance and have results recorded in the TB register. Denominator: Total number of bacteriologically confirmed TB cases notified during the reporting period	National (2014) 3 % (5,607/199,770)  New cases 0.3% (662/193,321) Previously treated: 77% (4945/6449)	Not applicable to set the target	-
			CTB (10 intensified districts 7% (2014) (1,478/20,839)  New cases 1.4% (283/18,968) Previously treated 64% (1195/1871)	Previously treated = 100% (National Strategy)	CTB (10 intensified districts) (2015)* 9% (922/10,003)  New cases 1% (96/9,133) Previously treated 95% (826/870) * up to June 2015
<b>2.4.5.</b>	% unsuccessful Xpert tests	Description: This indicator measures proportion of unsuccessful Xpert tests Indicator Value: Percent Level: National and Challenge TB geographic areas Numerator: Number of unsuccessful Xpert tests Denominator: Total number of Xpert tests.	5% (2014)	<5%	CTB areas APA1 (9 prov): 5% (617/12,205)
<b>2.4.6.</b>	#/% of new TB cases diagnosed using GeneXpert	Description: Proportion of new TB cases diagnosed using GeneXpert Indicator Value: Percent Level: National and Challenge TB geographic areas Numerator: Number of new TB cases diagnosed using GeneXpert Denominator: Total number of new TB cases	CTB areas (5 provinces) 2014 : 0.6% (628/97,213)	N/A	CTB (5 provinces) (2015) 2% (1,104/52,327) * up to June 2015
<b>2.7.1.</b>	#/% of laboratories implementing (internationally recommended) national biosafety standards (stratified by laboratories performing culture, DST and Xpert)	Description: This indicator measures proportion of TB laboratories implementing internationally recommended biosafety standards (stratified by laboratories performing culture, DST and Xpert). Note that this measurement requires operations research using a valid tool. Indicator Value: Percent Level: National and Challenge TB geographic areas Numerator: Number of TB laboratories implementing national biosafety standards Denominator: Total number of TB laboratories	8	9	CTB areas ( 5 provinces)  Culture = 100% ( 11/11)  DST: 100% (100% (10/10)  Xpert: 100% (22/22)

### Sub-objective 3. Patient-centered care and treatment

One of main priority gaps defined in the National TB program Strategy for 2015-2019 is low case notification. With stagnant case notification in the last 5 years and new ambitious target sets in NSP 2015-2019, CTB's main approach to support NTP related to case finding by developing a national policy and guideline for nation-wide expansion of active/ intensified case finding approaches. However the implementation in selected districts will be started in year 2. The targeted risk groups for ACF/ ICF have been identified as follows: people with Diabetes Mellitus, Childhood TB, and PLHIV. The program will also encourage screening of male smokers, people over 55 years of age, undernourished adults, and ex-TB patients coming to health facilities. Beside preparation phase for ICF, CTB continues to provide support on TB, DR-TB, and TB-HIV to ensure the access to quality treatment and care is ensured.

Related to TB-HIV, at the national level, TA was provided to help the NTP and NAP finalize the National TB-HIV Action Plan 2015-2019. The Action Plan will guide implementation of TB-HIV activities nation-wide, including in the 10 CTB focus districts, which are to serve as the model. During APA 1 CTB was also charged with providing TA to the Directorate General (DG) for Corrections to finalize the National TB-HIV Action Plan for Prison Settings, 2015-2019, using experiences from the work done among TB-HIV inmates in prisons during TB CARE I and APA 1 of CTB.

#### **Key results**

##### xi. **A. Intensified Case Finding (ICF)**

⇒ ICF in Diabetes Mellitus

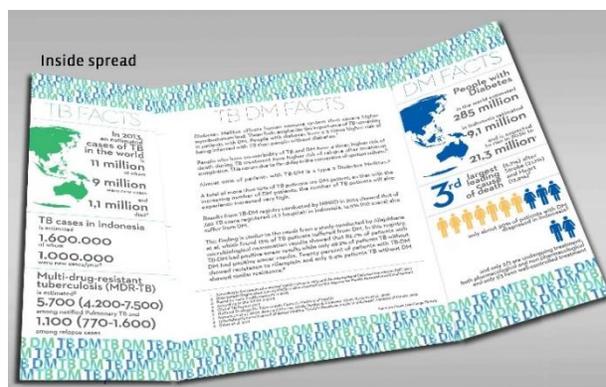
Strengthened TB-Diabetes Mellitus collaboration

Pilot project for bi-directional TB-DM screening was conducted in North Sumatera, South Sulawesi, and Central Java between October 2014-February 2015. The initial results of those pilots has been evaluated during coordination meetings between NTP, DM and Metabolic Diseases Sub Directorate and Professional Organization concluding that the protocol for bi-directional screening TB-DM is applicable to be implemented and it is recommended to expand the approach.

TB- DM collaboration between internal MoH and professional organization has been documented. Through National TB-DM Consensus meeting in August 2015, seven (7) Professional Organization and MoH Directorate (Communicable and non Communicable Diseases) signed a Consensus Charter to declare a mutual collaboration in the TB and diabetes mellitus governance. CTB also provided support to develop the IEC (Information, Education and Communication) material for TB-DM i.e. fact sheet and video. The fact sheet and video described the TB-DM current situation and brief information of TB-



**Figure 5: TB-DM Consensus Charter (Source: Trishanty)**



**Figure 6: Fact sheet TB-DM developed By CTB (Source: Trishanty)**

DM collaboration. Those materials have been disseminated during the National TB-DM Consensus Meeting.

- ICF in Risk groups

The list of prioritized risk-groups, algorithms, and piloting plan for additional risk-groups was finalized. The development of revised/new appropriate screening algorithms for the NTP and research protocol to assess their impact on case notification and costs (considering yield vs cost, availability and access). Prisons, PHCs and public hospitals in Jakarta and West Java Province have been visited to gain informations which will be taken into consideration in designing an ICF model for piloting and scale up in CTB areas. Ex-TB patients, >55 years of age, male smokers, undernourished adults, and people with DM were identified as priority risk-groups. These were agreed following the assessment and the subsequent NTP and CTB coordination meeting on 1st June 2015, including algorithms and implementation area.

⇒ ICF on PLHIV

In the 10 CTB focus districts, there are 27 ART referral hospitals and 17 ART satellite in PHCs (CST service), which are already implementing DOTS; 7 of these hospitals have Xpert MTB|Rif machines in place. All PLHIV in these facilities are supposed to be screened for TB symptoms and signs at each visit, leading to appropriate investigations and treatment for pulmonary and extra-pulmonary TB when indicated.

**Table 3: Number of PLHIV screened for TB, 2013-2014 in 10 CTB districts**

DISTRICT	2013		2014	
	PLHIV Screened		PLHIV Screened	
<b>Medan</b>	100%	(2,822/2,822)	97%	(2,437/2,524)
<b>Deli Serdang</b>	100%	(79/79)	79%	(86/109)
<b>Jakarta Timur</b>	56%	(443/787)	33%	(498/1,494)
<b>Jakarta Utara</b>	88%	(1,465/1,659)	87%	(1,930/2,217)
<b>Bandung</b>	99%	(1,663/1,682)	100%	(1,253/1,253)
<b>Bogor</b>	N/A		48%	(24/50)
<b>Semarang</b>	95%	(560/588)	100%	(836/836)
<b>Surakarta</b>	100%	(393/394)	100%	(620/620)
<b>Jember</b>	100%	(249/249)	99%	(394/400)
<b>Tulungagung</b>	82%	(454/556)	51%	(204/401)
<b>TOTAL 10 Districts</b>	<b>92%</b>	<b>(8,128/8,816)</b>	<b>84%</b>	<b>(8,282/9,904)</b>

According to the TB-HIV National Action Plan, as of year 2014, which was the final year of TB CARE I, 100% of PLHIV visiting ART care centers should be screened for TB. The data indicate an increase in numbers of individuals in ART care centers in our 10 focus districts (from 8,816 to 9,904), but without a proportional increase in the number screened for TB so that this indicator only reached 84% (Table 3). One of the major observations by CTB staff is that staff in both HIV and TB units are confused and overburdened by the need to manually enter data into two (2) information systems. Specifically it is noted that not all HIV care units have started using the HIV care card (*ikhtisar keperawatan*), which contributes to significant under recording and reporting. This, in addition to high staff turnover, has hampered the ability to collect accurate data. In addition, there was also some misunderstanding among health care workers about the process for PLHIV visits and TB screening, leading some health facilities to conduct screening only to new PLHIV.

Among PLHIV screened at ART referral hospitals that have Xpert MTB|Rif (n=9), Table 4 shows their diagnostic outcomes<sup>4</sup>:

**Table 4: Proportion of PLHIV confirmed for TB and DR-TB with Xpert MTB|Rif examination in 10 CTB districts**

	<b>TOTAL PLHIV examined</b>	<b>MTB Rif Susceptible</b>	<b>MTB Rif Resistant</b>
<b>2014</b>	732	109 (15%)	23 (3%)
<b>2015 (up to June)*</b>	179	61 (34%)	1 (0.5%)

Based on findings during Year 1, in Year 2, CTB will work through professional organizations such as Internal Medicine Association and Pulmonologist Association (PAPDI & PDPI) and the PPM team to strengthen internal linkage in health facilities. CTB will emphasize a comprehensive approach to CST clinicians for TB-HIV and promote ICF and IPT, including the use of Xpert for both ICF and for clearing PLHIV for initiation of IPT. CTB will also improve TB record and report in HIV units and strengthen linkage between ART facilities and Xpert service.

⇒ TB among prison and detention center inmates

In 10 CTB priority districts, there are 24 prisons/DCs, which CTB will support, of which 12 (8 prisons & 4 DCs) are newly supported for TB (and TB-HIV) starting with CTB Year 1. Based on the preliminary assessment of these new prisons/DCs, we have determined that there are four (4) that do not have health care workers (doctor/nurse). Among the rest of the newly supported prisons/ DCs, seven (7) out of eight (8) have already conducted TB screening for new inmates (some with help from the nearby PHC staff).

From the total of 24 prisons/DCs, there are 19 (79%) that regularly conduct new inmate screening and 12 (50%) prisons/DCs that conduct annual mass screening. Unfortunately not all of these prisons/DCs have access/linkage to services related to TB, TB-HIV, and DR-TB. Currently, seven (7) prisons/DCs do not have access for HIV testing, four (4) prisons/DCs do not have access to HIV service, two (2) prisons/DCs do not have access to Xpert MTB|Rif service (laboratory/hospital). All 24 prisons/DCs have access to DR-TB treatment, including the two (2) prisons/DCs in West Java & North Sumatera and one (1) prison hospital in DKI Jakarta where staff are already trained and appointed to be the PMDT treatment site and referral for all inmates.

In terms of reporting, 70% (17/24) of prisons/DCs already report TB (including TB-HIV) data and indicators to the NTP and the MoLHR (Ministry of Law and Human Rights) through the District Health Offices (DHO) and the MoLHR Provincial Offices. Below are the results of TB ICF among inmates<sup>5</sup>:

<sup>4</sup> Limited cartridge stock at Xpert/MTB Rif facilities has resulted in fewer tests being done so far in 2015 as there was a decision to prioritize cartridge use for MDR TB presumptive cases.

<sup>5</sup> Surakarta DC and Tulungagung prison did not report to MoLHR in year 1 because Tulungagung prison does not have health staff while Surakarta DC had a misperception regarding health reporting due to new regulation from MoLHR, where they thought TB report is not part of the reporting.

**Table 5: TB Intensified Case Finding among inmates from 24 prisons/DCs in 10 CTB districts 2014-2015.**

Districts	# prison	# inmates	# screened new and annual mass screening (% Inmates Dec 2014)		# Presumptive TB (% Inmates screened)		# TB cases all cases (% presumptive cases confirmed)	
			2014	2015*	2014	2015*	2014	2015*
Year of	2015*	2014**	2014	2015*	2014	2015*	2014	2015*
Medan	4	6,441	3,401 (52.8%)	2,034 (31.6%)	164 (4.8%)	117 (5.8%)	38 (23%)	24 (20.5%)
Deli Serdang	3	2,139	921 (43.1%)	970 (45.3%)	27 (2.9%)	7 (0.7%)	5 (18.5%)	2 (28.6%)
Jakarta Timur	4	9,971	8,282 (83.1%)	8,328 (93.5%)	844 (11.4%)	540 (6.5%)	130 (15.4%)	61 (11.3%)
Jakarta Utara	-	-	-	-	-	-	-	-
Bandung	5	2,962	3,119 (105.3%)	1,386 (46.8%)	107 (3.4%)	29 (2.1%)	8 (7.5%)	8 (27.6%)
Bogor	3	2,268	1,843 (81.3%)	794 (35%)	135 (7.3%)	51 (6.4%)	17 (12.6%)	9 (17.6%)
Semarang	2	1,515	1,284 (84.7%)	628 (4.1%)	17 (1.3%)	10 (1.6%)	2 (11.8%)	2 (20%)
Surakarta	1	537	No report	No report	No report	No report	No report	No report
Jember	1	499	1,286 (257.7%)	474 (94.9%)	4 (0.3%)	3 (0.6%)	3 (75%)	2 (66.7%)
Tulung Agung	1	264	269 (101.9%)	No report	0	No report	0	No report
Total 10 districts	24	26,596	20,405 (77%)	14,614 (55%)	1,298 (6.4%)	757 (5.2%)	203 (15.6%)	108 (14.3%)

\*updated 30 July 2015

\*\*Total inmates as of December 2014, used as denominator for both 2014 and 1<sup>st</sup> 6 months 2015

Regarding to treatment outcome, Table 6 shows the achievement of TB treatment success was still below the national target for the 2013 Cohort (56%) and continues for the 2014 Cohort 2014 up to June 2015 (59%). Of special concern, was the high number of "not evaluated" patients due to weak reporting on the "TB 10" treatment completion form. However, the results of successful transfer of TB patients from prison to assigned facilities in the community, for continuing treatment, were good - 73% in year 2014, and 90% up to quarter 2 of 2015.

**Table 6: Treatment results among inmates with TB from prisons/DCs in 10 CTB districts (all TB cases, new and re-treatment)**

Treatment Result	TB patients cohort 2013	TB patients cohort 2014 (up to June)
<b>Cured</b>	67 (27%)	41 (34%)
<b>Completed</b>	72 (29%)	30 (25%)
<b>Died</b>	22 (9%)	12 (10%)
<b>Failed</b>	6 (2%)	6 (5%)
<b>Lost to follow-up</b>	10 (4%)	0 (0%)
<b>Not evaluated</b>	74 (29%)	33 (27%)
<b>Total</b>	251	122

In year 2, to reinforce the ICF among inmates strategy, based on the experience of 2014's TB national prevalence survey, CTB will support the 12 new prisons/DCs to conduct mass screening using modified symptomatic screening and chest Xray as screening tools along with continued use of Xpert MTB/Rif examination for diagnosis. CTB will also reduce the "not evaluated" component

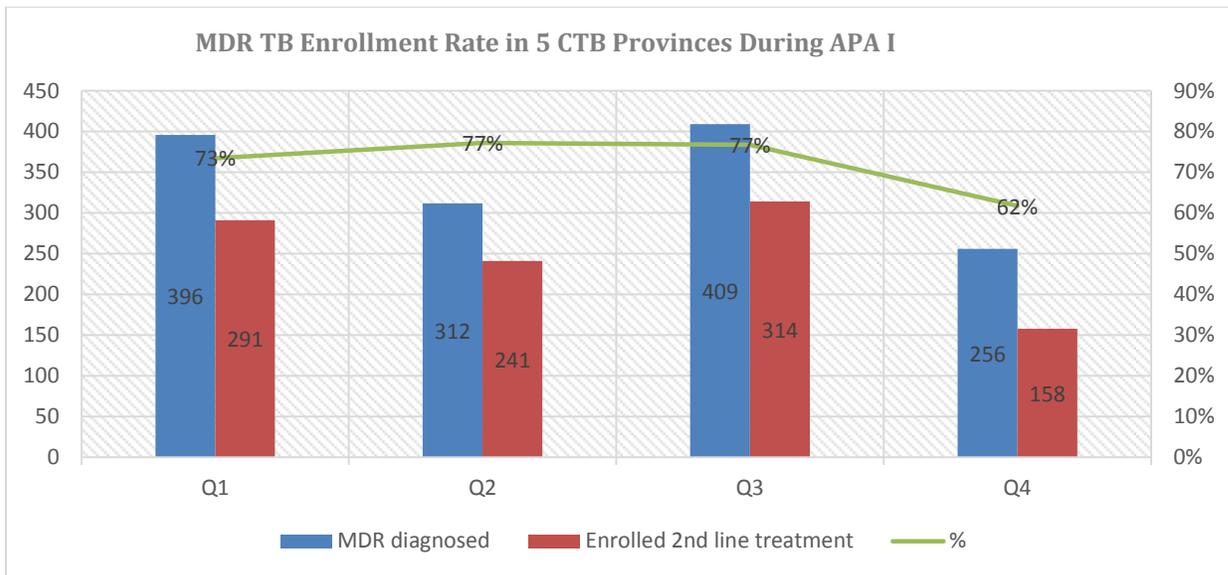
through support the piloting of strengthening the parole officer role in post-release follow-up and external linkage within PPM to ensure continuation of TB treatment among released inmates.

xii. **B. ACCESS TO QUALITY TREATMENT & CARE ENSURED FOR TB-HIV FOR ALL RISK GROUPS FROM ALL CARE PROVIDERS**

- Programmatic Management of Drug-resistant Tuberculosis (PMDT)

CTB has provided support in expansion of PMDT sites to ensure MDR-TB patient get an access to PMDT services. Currently there are 10 referral hospitals, 11 sub referral hospitals, and 851 satellite centers in 9 provinces of CTB areas.

Between October 2014 to September 2015 1,373 patients were diagnosed with MDR-TB out of 9,316 presumed cases in the 5 CTB priority provinces, this was 83% of APA 1 target (1,650), and 68% of the national number. However, the number of MDR-TB patient enrolled on treatment in APA 1 is still low (73%). To address this, CTB continuesly provided psycho-social support through patient groups, trained health care workers communication skills through Motive8 to increase the number of confirmed MDR-TB cases enrolled on treatment, and to conduct cohort review.



**Figure 7: MDR TB enrollment rate in 5 CTB Provinces (October 2014- September 2015)**

- Cohort Review

During APA1, 18 cohort reviews were conducted in eight (8) referral hospitals. The latest result of the cohort review were:

- 3 hospitals have loss-to-follow-up within the first 6 months - less than 10%,
- 5 hospitals have of patients with unknown culture and smear status - less than 15%,
- 2 hospitals have patients with culture conversion within the first 6 months - more than 80%,
- 1 hospital has loss-to-follow-up within 7-12 months - less than 10%,
- 6 hospitals have patients with unknown culture status at 12 months - less than 15%,
- 2 hospitals have patient who have a final outcome of either cured or completed treatment - more than 70%,
- 3 hospitals have patient cured among the treatment success - more than 80%,
- 1 hospital has patient who default at the end of treatment - less than 10%.

- Universal Testing for DR-TB

The first steps towards universal testing among new pulmonary TB cases have been taken. The NTP and GF agreed to increase target and support for universal testing of DR-TB. The NTP has proposed 100% re-treatment cases and a minimum of 75% of new pulmonary TB cases should be tested for DR-TB in 142 LKB/ SUFA districts by 2016-2017. So far only Jakarta (1 site) and East Java (3 sites) are already implementing universal DR-TB testing, meanwhile Central Java and West Java are still in the preparation process. One of the limiting factors was the condition of GeneXpert modules where several sites reported them as broken/ in non-operable condition. Furthermore, the low through-put capacity of GeneXpert machines is currently one of the biggest bottlenecks in achieving universal testing targets.

Adaptation of universal DR-TB testing policy in NSP, CN NFM GF, and National TB Guidelines were completed. The SOP will be developed locally by PHO, the diagnostic center, and PMDT sites with TA from the provincial CTB team.

The PMDT action plan at DKI provincial level has been finalized; several key actions have been undertaken with funding from GF, CTB, and WHO core budget. The stakeholders' preparation meeting, coordination, hospital readiness assessment, advocacy, and two (2) batches of PMDT basic trainings for HCW at newly appointed PMDT hospitals have been implemented. The Sulianti Saroso hospital is ready to enroll DR-TB patients for North Jakarta area.

**Table 7: National TB Program key performance and targets, 2014-2016**

No	Indicators	Baseline 2013/2014	Achievement 2015*	Target 2015 ***	Targets 2016****
1	Number of notified cases of all forms	2014(324,539 )	124,557	357, 646	393,046
2	TSR, all forms	88% 285,935/ 324,539	64% 60,253/94,552	90%	90%
3	Children U5Y on IPT	NA	NA	13,629	31,404
4	TB cases notified in prisons	1027(2013)	305	1095	1144
5	Number of case notified by Non NTP providers	85,772	32,209**	71,529	94,331
6	TB patient with known HIV status	4.7% 15,074/ 322,806	7% 8,728/ 124,557	10%	25%
7	TB-HIV given ART	26% 624/2,355	26% 305/ 1,174	100%	100%
8	Number of DR TB testing	9,696	10,144	44,893	64,936
9	TB RR/ MDR confirmed cases	1,685 (2013) ****	1,392***	2,836	4,676
10	TB RR/ MDR enrolled	1,217 (2013) ****	1,076***	2,836	4,676
11	Loss to follow up TB RR/MDR	15% (2013) ****	19%	10%	5%

\* Jan-Jun 2015

\*\* only data from public/ private hospitals

\*\*\* up to 30 September 2015;

\*\*\*\* Source: National Strategic Plan for TB control 2015-2019

- Motive8 and Expert Patient Trainers

CTB had been requested by the NTP to support TA on improvement of patient-centered MDR-TB communication and counseling (though NTP avoids using the word 'counseling' to differentiate it from HIV activities). The objectives of improving communication skills of TB care providers (clinicians, nurses, social workers) were to prevent patients' refusal to SLDs treatment and to prevent treatment drop-out. The model CTB chose for improving communication skills was Motivational Interviewing (Motiv8). CTB brought in an external consultant with Motiv8 expertise to help. Borrowing from successes in HIV treatment support, CTB also used Expert Patient Trainers (EPT) who are cured MDR-TB patients, to train care providers. The trainees were MDR-TB care providers from PMDT facilities in CTB districts. The training modules are now included in the National Training Packages of PMDT.

CTB in Year 1, supported PMDT communication training for health care workers in West Java (76 participants – 26 Male, 50 Female) & DKI Jakarta (27 participants – 3 Male, 24 Female). CTB also provided TA on 1 batch of Motiv8 training to PMDT supporting nurses funded by LKNU CEPAT (13 participants 3 Male, 10 Female).

CTB facilitated EPT Training 1 batch funded by LKNU CEPAT (13 participants – 8 male, 5 female), 1 batch funded by CTB (15 participants – 9 male, 4 female).

Training Motiv8 for PMDT master trainers held in Bandung, West Java, for 5 effective days, with the support from CTB and with consultant Matt Avery from FHI360. Total participants 20 (11 male, 9 female).



**Figure 8: PHO Head of Section for Communicable & non Communicable Disease gave opening remarks for EPT Workshop in Central Java (Photo Courtesy of FHI360)**

- TB-HIV

In year 1, CTB started to develop the model of Continuum of Prevention to Care in 10 CTB districts. DHO played the leading role on networking of services from hospitals, PHCs and communities. HIV testing and counseling and HIV care are available only in some hospitals and PHCs. Networking for services is the key along with an effective referral system. For longer term, scaling up of HIV services in PHCs where most of TB patients are detected is the key to success.

In the 10 focus CTB districts, there are 33 HIV testing and counseling sites in 67 government hospitals and 133 sites in 518 PHCs.

Table 8 shows the proportion of notified TB patients whose HIV status is known and recorded in the TB register with comparison from Year 4 TB CARE I.

**Table 8: Number of TB patients receive an HIV test and known their status in 10 CTB districts, 2013 – 2014 (up to June)**

Districts	TB patients		Known HIV status		HIV Positive	
	2013 <sup>^</sup>	2014*	2013 <sup>^</sup>	2014*	2013 <sup>^</sup>	2014*
KOHORT TB						
Kota Medan	6,066	3,035	372 (6%)	133 (4%)	46 (12%)	9 (7%)
Deli Serdang	2,623	1,461	34 (1%)	33 (2%)	19 (56%)	3 (9%)
Jakarta Timur	6,335	3,620	194 (3%)	314 (9%)	135 (70%)	101 (32%)
Jakarta Utara	3,274	1,720	16 (0.4%)	71 (4%)	4 (25%)	49 (69%)
Kota Bandung	4,221	3,754	239 (6%)	225 (6%)	35 (15%)	26 (12%)
Bogor	8,002	4,137	3 (0%)	71 (2%)	0	1 (1.4%)
Kota Semarang	2,958	1,174	113 (3%)	109 (9%)	35 (31%)	33 (30%)
Kota Surakarta	1,473	742	48 (3%)	185 (25%)	30 (63%)	1 (0.5%)
Jember	3,104	1,536	59 (2%)	77 (5%)	0	3 (4%)
Tulung Agung	909	371	13 (1%)	0 (0%)	11 (87%)	0
Total 10 Districts	38,965	21,550	1,091(3%)	1,218 (6%)	315 (29%)	226 (19%)

*\*update up to quarter 2-2014 (data per 14 August 2015), cleaning and analyze from individual data  
<sup>^</sup>10 variable of TB-HIV from TB, reporting TB CARE I*

**Table 9: Number of TB patients with known HIV status based on time of testing, 2013-2014 (up to June) cohort**

Districts	Known HIV status		Known HIV status before TB Treatment started				Known HIV status during TB Treatment			
	2013 <sup>^</sup>	2014*	2013 <sup>^</sup>		2014*		2013 <sup>^</sup>		2014*	
COHORT TB	TOTAL		HIV Pos	HIV Neg	HIV Pos	HIV Neg	HIV Pos	HIV Neg	HIV Pos	HIV Neg
Kota Medan	372	133	34 (9%)	0	7 (5%)	0	12 (3%)	326 (88%)	2 (2%)	124 (93%)
Deli Serdang	34	33	2 (6%)	0	2 (6%)	0	17 (50%)	15 (44%)	1 (3%)	30 (91%)
Jakarta Timur	194	314	111 (58%)	0	85 (27%)	42 (13%)	24 (12%)	59 (30%)	16 (5%)	171 (54%)
Jakarta Utara	16	71	0	0	49 (69%)	14 (20%)	4 (25%)	12 (75%)	0	8 (11%)
Kota Bandung	239	225	26 (11%)	0	16 (7%)	0	9 (4%)	204 (86%)	10 (4%)	199 (89%)
Bogor	3	71	0	0	1 (1%)	70 (99%)	0	3 (100%)	0	0
Kota Semarang	113	109	2 (2%)	0	33 (30%)	73 (67%)	33 (29%)	78 (69%)	0	3 (3%)
Kota Surakarta	48	185	0	0	1 (1%)	150 (81%)	30 (63%)	18 (37%)	0	34 (18%)
Jember	59	77	0	0	0	0	0	59 (100%)	3 (4%)	74 (96%)
Tulung Agung	13	0	0	0	0	0	11 (85%)	2 (15%)	0	0
Total 10 Districts	1,091	1,218	175 (16%)	0	194 (16%)	349 (29%)	140 (13%)	776 (71%)	32 (3%)	643 (52%)

According to the National Action Plan TB-HIV 2010-2014, target for TB patients knowing their HIV status was 30%. The average result in 10 CTB districts was 6% among the TB cohort 2014, while at the national level the figure was 5% (draft Global TB Report 2015). The main

challenges are a) limited HIV testing sites and difficulties in referral system b) limited capacity of TB clinic staff to provide PITC, c) TB staff did not put the results in the record and report.

**Table 10: Number of TB-HIV patients received ART and CPT in 10 CTB districts, 2013 – 2014 (up to June)**

Districts	TB-HIV patient		Received ART		Received CPT	
	2013^	2014*	2013^	2014*	2013^	2014*
KOHORT TB						
Kota Medan	46	9	44 (96%)	9 (100%)	42 (91%)	9 (100%)
Deli Serdang	19	3	17 (89%)	2 (67%)	16 (84%)	2 (67%)
Jakarta Timur	135	101	54 (40%)	28 (28%)	73 (54%)	40 (40%)
Jakarta Utara	4	49	0 (0%)	12 (24%)	4 (100%)	23 (47%)
Kota Bandung	35	26	27 (77%)	22 (85%)	23 (65%)	22 (85%)
Bogor	0	1	-	0 (0%)	-	0 (0%)
Kota Semarang	35	33	13 (37%)	13 (39%)	0 (0%)	11 (39%)
Kota Surakarta	30	1	26 (87%)	0 (0%)	16 (53%)	0 (0%)
Jember	0	3	-	0 (0%)	-	1 (33%)
Tulung Agung	11	0	3 (27%)	-	0 (0%)	-
Total 10 Districts	315	226	184 (58%)	86 (38%)	174 (55%)	108 (48%)

**\*up to quarter 2 year 2014 (updated 14 August 2015)**

According to National Action Plan TB-HIV 2010-2014, the target percentage of TB-HIV patients who should receive ART was 80%, and CPT 100%. The low initiation of ART during TB treatment of those who had HIV appear to be due to the following reasons; a) poor adherence to guidelines: although the national guidelines for ART recommended to give ART regardless of CD4 count level, many clinicians still requested CD4 count as baseline, b) waiting for other lab results before ART initiation, c) weak coordination between TB and HIV clinics and d) under reporting. Specifically, there are delays in reporting due to lack of TB-HIV data being recorded in the TB register (TB03) which then prevents it from being in the TB Integrated Information System (SITT). For CPT initiation, the reasons for delay were the same, plus the clinicians waited for CD4 count below 200.

In year 2, CTB will support strengthening capacity for clinicians to fully understand and adhere to TB-HIV clinical management, involving professional organizations related to revised guideline of TB-HIV, provide regular clinical and RR (recording & reporting) mentoring to health facilities and support DHO for regular supervision to low performance health facilities and continue to support PITC workshop for TB clinic staff.

- TB in Children

The National Action Plan of Childhood TB 2016-2019 is almost finalized. The plan will be used by the NTP as a roadmap to strengthen childhood TB activities in the next four (4) years. The National action plan was developed in collaboration with IDAI and MCH program and in line with the National Strategic Plan 2015-2019.

#	Outcome Indicators	Indicator Definition	Baseline (Year/ timeframe)	Target	Result
				Y1	Y1
3.1.2	#/% of cases notified (new confirmed)	<p>Description: Proportion of new confirmed TB cases reported by the NTP</p> <p>Indicator Value: Percent</p> <p>Level: National and Challenge TB geographic areas</p> <p>Numerator: Number of new bacteriologically-confirmed TB cases reported in the past year. A new case is a TB patient who has never had treatment for TB or who has taken anti-TB drugs for less than one month. A bacteriologically confirmed TB case is one from whom a biological specimen is positive by smear microscopy, culture or WHO approved rapid test (such as Xpert MTB/RIF).</p> <p>Denominator: Total number of new TB cases (bacteriologically confirmed + clinically diagnosed)</p>	9 CTB Provinces (2013) 120,213	158,980	9 CTB provinces (2014) : 59% (91,869/ 157,004)
			10 intensified districts (2013) 15, 562  (not include Semarang city and Deli Serdang, will be updated later )	Increased 15% per year ( TB National Strategy)	10 intensified districts (2014): 64% (23,272/36,392)  Data 2015 not available yet
3.1.3	Case notification rate	<p>Description: Case notification rate (per 100,000 population) all forms of TB (i.e. bacteriologically confirmed plus clinically diagnosed, new and relapse)</p> <p>Indicator Value: Number per year per 100,000 population</p> <p>Level: National</p> <p>Numerator: Number of new and relapse TB cases (bacteriologically confirmed plus clinically diagnosed) reported to the NTP during a year</p> <p>Denominator: Population size (available from the most recent census data)/100,000</p>	139 (2013) in CTB provinces	150	CTB areas (9 provinces) 2014:
			CTB areas (10 districts)-2013 : 192  (41,152/21,424,169 *100,000)		CTB areas (10 districts) 2014: 185 (40,577/ 21,956,625*100,000)  Data 2015 not available yet
3.1.4	Number of MDR-TB cases detected	<p>Description: Total number of bacteriologically confirmed MDR-TB cases diagnosed. Project should follow the MDR-TB/Xpert algorithm in country regarding whether Rifampicin-resistant TB cases (RR-TB) should be counted as confirmed MDR-TB. If a country's algorithm states that a RR-TB cases is</p>	National (2014) 1812  CTB areas ( 5 provnnces), 2014: 1,299		CTB areas ( 5 provinces), up to 19 October : 1,013

		<p>automatically assumed to be MDR-TB (i.e. no further DST required), then RR-TB should be included in the number of confirmed MDR-TB cases diagnosed. Otherwise, RR-TB should be excluded until proven via further DST that the case is a confirmed MDR-TB case.</p> <p>Indicator Value: Number</p> <p>Level: National and Challenge TB geographic areas</p> <p>Numerator: Number of bacteriologically confirmed MDR-TB cases diagnosed during the reporting period</p>			
<b>3.1.6</b>	% of HIV+ patients who were screened for TB in HIV care or treatment settings	<p>Description: The purpose is to monitor an activity intended to reduce the impact of TB among HIV-positive patients. It will demonstrate the level of implementation of the recommendation that HIV-positive patients are screened for TB at diagnosis and at all follow-up visits.</p> <p>Indicator Value: Percent</p> <p>Level: National and Challenge TB geographic areas</p> <p>Numerator: Number of HIV-positive patients seen at HIV testing and counseling or HIV treatment and care services who were screened for TB symptoms at least once during year.</p> <p>Denominator: Total number of HIV-positive patients seen at HIV testing and counseling or HIV treatment and care services.</p>	CTB areas (10 intensified districts) 2013: 92% (8128/8816)	100%	CTB areas (10 districts) 2014 : 84% (8,282/9,904)  Data 2015 not available yet
<b>3.1.8</b>	% of TB cases (all forms) diagnosed among children (0-14)	Description: This indicator measures proportion of TB cases (all forms) diagnosed in children 0-14 years of age. When childhood TB is a priority, being able to report on and measure changes in case notification by age	CTB 9 provinces: 9% (2013)	8-12%	CTB areas (9 prov) 2014: 8% (16,666/197,302) Data 2015 not available yet
			CTB areas (data)	8-12%	CTB areas 10

		<p>group is important. Indicator Value: Percent Level: National and Challenge TB geographic areas Numerator: Number of TB cases (bacteriologically confirmed + clinically diagnosed; includes new &amp; relapse cases) diagnosed in children 0-14 years of age in the past year. Denominator: Total number of all TB cases (bacteriologically confirmed + clinically diagnosed; includes new &amp; relapse cases) reported in the past year</p>	<p>available only 5 districts) 11% (2844/25,182)*  Only data from Jember, North Jakarta, East Jakarta, Bandung city, Medan city)</p>		<p>districts 2014: 10% (4,193/40,577)  CTB (10 districts) (2015)* 13% (2,676/20,439)  * up to June 2015</p>
<b>3.1.1 2</b>	#/% of diagnosed TB cases that are clinically diagnosed	<p>Description: Proportion of diagnosed TB cases that are clinically diagnosed Indicator Value: Percent Level: National and Challenge TB geographic areas Numerator: Number of TB cases that are clinically diagnosed Denominator: Total number of diagnosed (bacteriologically confirmed + clinically diagnosed) TB cases</p>	Not available	Not available	<p>CTB areas (10 districts) 2014: 30% (12,403/40,577)  CTB (10 districts) (2015)* 51% (10,432/20,439)  * up to June 2015</p>
<b>3.2.1</b>	Number and percent of TB cases successfully treated (all forms) by setting (i.e. private sector, pharmacies, prisons, etc.) and/or by population (i.e. gender, children, miners, urban slums, etc.).	<p>Description: The proportion of a cohort of TB cases (all forms, bacteriologically confirmed and clinically diagnosed, new and relapse) registered in a specified period that were successfully treated, whether with bacteriologic evidence of success ("cured") or without ("treatment completed") by setting (i.e. private sector, pharmacies, prisons, etc.) and/or by population (gender, children, miners, urban slums, etc.) and/or risk population groups defined by national policy (IDUs, diabetics, prisoners, etc.). There may be overlap between settings and groups. Disaggregation by risk population is required in contexts where Challenge</p>	<p>CTB areas (10 intensified districts) 84% ( 2013)</p>	85%	Data TSR for 2014 not available yet

		<p>TB is providing treatment support for a specific group according to the annual work plan or in contexts where operations research allows for disaggregation and comparison across groups.</p> <p>Indicator Value: Percent Level: National and Challenge TB geographic areas</p> <p>Numerator: Number of new and relapse TB cases (all forms) registered in a specified period that were cured or completed treatment.</p>			
<b>3.2.4</b>	Number of MDR-TB cases initiating second-line treatment	<p>Description: The number of bacteriologically confirmed, clinically diagnosed or unconfirmed MDR-TB cases started on second-line treatment during the reporting period. Unconfirmed MDR-TB cases are those awaiting C/DST results. RR-TB may fall under confirmed or unconfirmed depending on the country's MDR-TB diagnosis algorithm.</p> <p>Indicator Value: Number Level: National and Challenge TB geographic areas</p> <p>Numerator: The number of confirmed or unconfirmed MDR-TB patients started on second-line treatment in the reporting period</p>	<p>National 2014: 1,284</p> <p>CTB areas 5 provinces (2014): 974</p>		<p>CTB areas 5 provinces Jan-September 2015): 846</p>
<b>3.2.7</b>	Number and percent of MDR-TB cases successfully treated	<p>Description: The proportion of confirmed MDR-TB patients successfully treated (cured plus completed treatment) among those enrolled on second line TB treatment during the reporting period (where applicable disaggregation by HIV status, XDR status). RR-TB may fall under confirmed MDR-TB depending on the country's MDR-TB diagnosis algorithm.</p> <p>Indicator Value: Percent Level: National and</p>	<p>National 2012 : 55% (236/432)</p> <p>CTB areas 5 provinces ( 56% (217/389)</p>		<p>CTB areas 5 provinces (cohort 2013) 45% (314/704)*</p> <p>Data not completed yet, since cohort for MDR TB is 24 months</p>

		<p>Challenge TB geographic areas</p> <p>Numerator: Number of confirmed MDR-TB cases successfully treated (cured plus completed treatment). Denominator: Total number of confirmed MDR-TB patients enrolled on second line TB treatment during the reporting period.</p>			
<b>3.2.9</b>	% of MDR-TB patients still on treatment and culture negative 6 months after starting MDR-TB treatment	<p>Description: Proportion of pulmonary MDR-TB cases on a treatment regimen with negative culture by 6 months</p> <p>Indicator Value: Percent</p> <p>Level: National and Challenge TB geographic areas</p> <p>Numerator: Number of pulmonary MDR-TB patients in a calendar year cohort who initiated SLD treatment and who have culture conversion latest at 6 months of treatment (having had 2 negative sputum cultures taken one month apart and remained culture negative since). Denominator: Total number of MDR patients who completed 6 months SLD treatment period in the calendar year</p>	<p>CTB areas (5 provinces) 59% (2013)</p>	80%	<p>CTB areas (5 prov) 2014:43% (415/976)</p>
<b>3.2.12</b>	% of HIV-positive registered TB patients given or continued on anti-retroviral therapy during TB treatment	<p>Description: The purpose is to measure commitment and capacity of TB service to ensure that HIV-positive TB patients are able to access ART. This indicator measures people registered as HIV-positive who started TB treatment and who also started or continued on ART (i.e. recorded in ART register). Indicator Value: Percent</p> <p>Level: National and Challenge TB geographic areas</p> <p>Numerator: All HIV-positive TB patients, registered over a given time period, who receive ART (are started on ART). Denominator: All HIV-positive TB patients</p>	<p>CTB areas (10 districts)</p> <p>Cohort 2013:58% (184/315)</p>	100%	<p>Cohort 2014*: 38% (86/226)</p> <p>* data available only up to Q2 2014.</p>

		registered over the same given time period.			
<b>3.2.1</b> <b>3.</b>	% TB patients (new and re-treatment) with an HIV test result recorded in the TB register	Description: The purpose is to assess how many TB patients know their HIV status, regardless of whether testing was done before or during TB treatment. In settings where HIV is driving the TB epidemic, all TB patients should be offered and encouraged to have an HIV test. Indicator Value: Percent Level: National and Challenge TB geographic areas Numerator: Number of TB patients registered over a given time period with an HIV test results recorded in the TB register. Denominator: Total number of TB patients registered over the same time period.	CTB areas (10 districts) Cohort 2013:3% (1,091/38,965	20%	Cohort 2014*:6% (1,218/21,550)  Data available up to Q3 2014
<b>3.2.1</b> <b>9.</b>	Treatment success rate of TB patients diagnosed in prison	Description: The proportion of a cohort of new and relapse TB cases (bacteriologically confirmed and clinically diagnosed) registered in a specified period in prison that successfully completed treatment, whether with bacteriologic evidence of success ("cured") or without ("treatment completed"). Indicator Value: Percent Level: National and Challenge TB geographic areas Numerator: Number of new and relapse TB cases (all forms) registered in a specified period in prison that were cured or completed treatment. Denominator: Total number of new and relapse TB cases registered in the same period in prison	CTB areas (10 districts) cohort 2013: 55% (139/251)	85%	Cohort 2014*:58% (71/122) *data available up to Q2 2014
<b>3.2.2</b> <b>4</b>	% MDR patients who receive social or economic	Description: Proportion of TB patients who receive any social or economic benefits (defined as tangible support through interventions	Not available	Not available	CTB areas (5 prov) APA1:  Psychosocial support (home

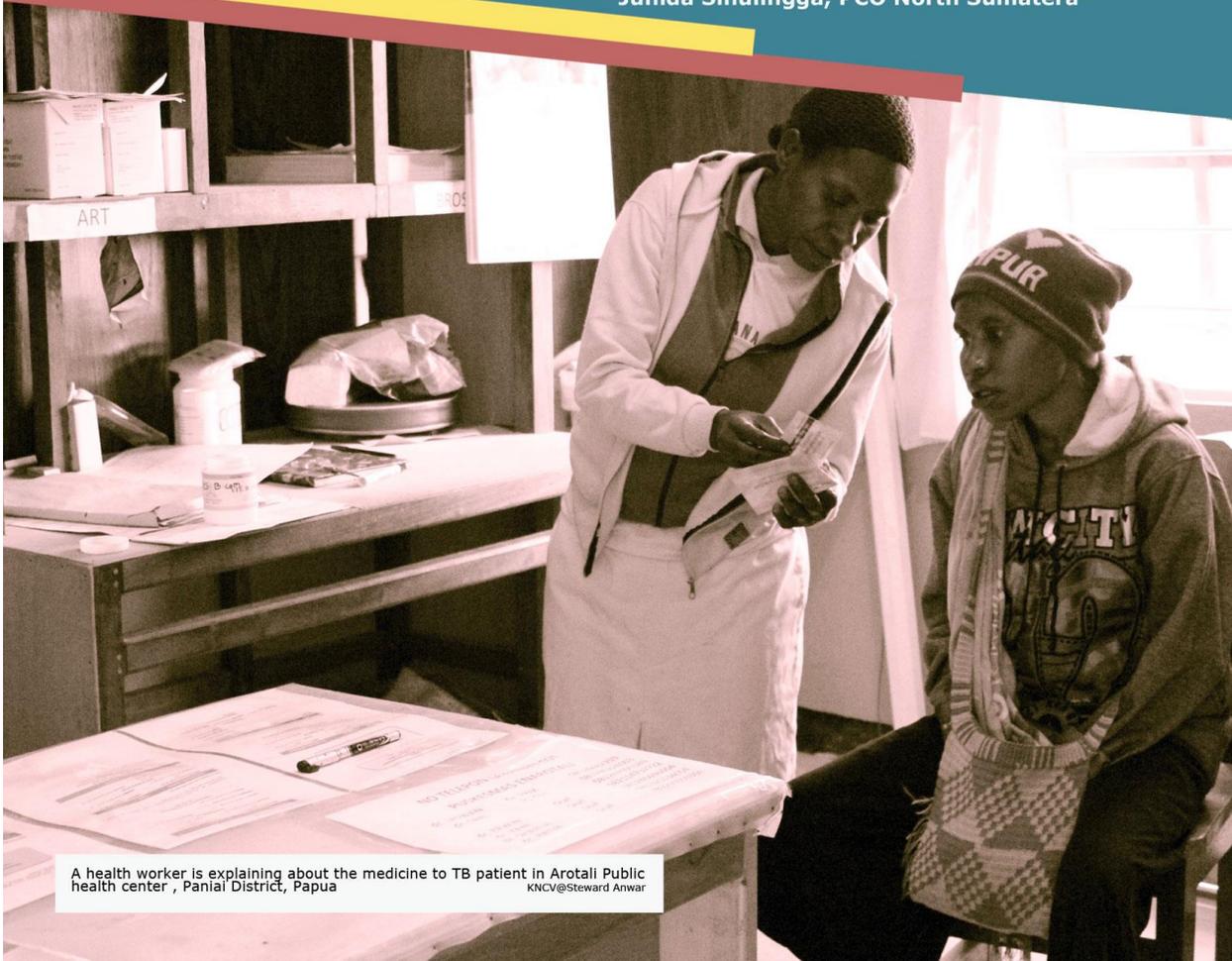
	benefits	<p>delivering services, psycho-emotional support, material goods and/or financial assistances) during the first month of second-line drug (SLD) treatment.</p> <p>Indicator Value: Percent</p> <p>Level: National and Challenge TB geographic areas</p> <p>Numerator: Number of MDR-TB patients who receive any social or economic benefits during the first month of SLD treatment</p> <p>Denominator: Total number of MDR-TB patients initiating SLD treatment during the reporting period</p>		<p>visit): 14% (160/1,129)</p> <p>Actually CTB through peer educator also give psycho social support by hospital visit (meet the patient while taken medicines, visit &amp; motivate in ward MDR patients, FGD patients, patient gathering), but the recording mechanism not record by name (only number ) therefore the total number is not valid due to name duplication.</p>
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A sequence from TemPo Implementation at Adam Malik Hospital, Medan, North Sumatera  
KNCV@Trishanty Rondonuwu

"TemPo strategy has been implemented in North Sumatera, at Adam Malik Hospital as the pilot model. TemPo scale up at the district level with 4 hospitals in districts area already received TemPo socialization and interested to implement."

-Junida Sinulingga, PCO North Sumatera-



A health worker is explaining about the medicine to TB patient in Arotali Public health center , Panial District, Papua  
KNCV@Steward Anwar

## Objective 2. Prevention

### Sub-objective 4. Targeted screening for active TB

One of the efforts to eradicate TB is by cutting its transmission chain during case finding especially in the high risk populations and cure them. People in prolonged close contact with TB patients are considered a high-risk population. So, the main focuses of case finding through contact investigation are: 1) bacteriologically confirmed TB patients especially those with children <5 years old; 2) childhood TB patients to find the index/ source case; 3) DR-TB patients; 4) TB-HIV infected patients/ PLHIV. During APA I, CTB supported the development of contact investigations national policy include its tool, focus on contacts of DR-TB patients, children under 5, and PLHIV. However, it is recognized that index cases are not always the ones first seen at the health services and thus might easily be missed in this narrow approach. Therefore CTB is planning to expand the remit to CI for all confirmed TB patients in CTB priority districts.

#### Key results

- National policy and technical guideline for CI is under development. First guideline development workshop for CI among children was conducted with NTP, Reproductive Health, Maternal Neonatal and Child Health program, IDAI and Childhood TB Working Group in July 2015, including to integrate CI with Isoniazid Preventive Therapy plan for children with LTBI. The finalization workshop planned at end of October 2015.
- Number of children under 5 years put on IPT is one of the key targets of the NFM where 13,000 children will be put on IPT in 2016. To met those target the implementation plan for CI and IPT were revised from only pilot at 4 selected districts (Bogor, Medan, Semarang, Solo) to nation-wide implementation at all comprehensive package districts.
- The forms for CI and IPT data collection were being prepared. During external review, Dr Ben Marais (WHO-consultant) recommended a separation of those RR system from current electronic TB management information systems.

#	Outcome Indicators	Indicator Definition	Baseline (Year/ timeframe)	Target	Result
				Y1	Y1
4.1.2.	#/% of children (under the age of five) who are contacts of bacteriologically-confirmed TB cases that are screened for TB	Description: The proportion of children (<5) who are contacts of bacteriologically-confirmed TB cases that are screened for TB (investigations for TB must be performed in accordance with existing national guidelines) Indicator Value: Percent Level: National and Challenge TB geographic areas Numerator: Number of children (<5) who are contacts of bacteriologically-confirmed TB cases that are screened for TB Denominator: Total number of children (<5) who are contacts of bacteriologically-confirmed TB cases	Not available	Not available	CTB areas (10 districts): N/A  Intervention will be implemented in APA2

4.1.3.	% of confirmed TB patients by case finding approach (CI, ACF, ICF), by key population and location (ex, slum dwellers, prisoners) (Service cascade)	Please refer to indicator 3.1.1 above	Not available	Not available	CTB areas (10 districts): N/A  Intervention will be implemented in APA2
4.2.6.	#/% of referrals from RMNCH programs/providers that are diagnosed with TB	<p>Description: Proportion of referrals from RMNCH (Reproductive, Maternal, Newborn and Child Health) programs/providers that are diagnosed with TB (both bacteriologically confirmed and clinically diagnosed)</p> <p>Indicator Value: Percent</p> <p>Level: National and Challenge TB geographic areas</p> <p>Numerator: Number of referrals from RMNCH programs/providers that are diagnosed with TB (all forms)</p> <p>Denominator: Total number of referrals from RMNCH programs/providers</p>	Not available	Not available	N/A  No surveillance system for this indicator. In APA 2 CTB implementation only focus on CI for children under 5

### Sub-objective 5. Infection control

The main focuses of TB infection eradication for CTB during APA I were on the TB infection control (TB-IC) guidelines development which has been initiated since TB CARE I project, documenting best practices on TemPO implementation, and also screening health care workers who have frequent contacts with TB patients.

#### **Key results**

##### i. **TemPO strategy scaled up**

CTB facilitated a workshop on TemPO implementation in 5 hospitals in 3 provinces (North Sumatra, Yogyakarta, and South Sulawesi), which was attended by TB Sub-directorate MoH, PERDALIN, KNCV, and hospitals team. During the meeting TemPO was introduced, Standard Operational Procedure (SOP) for hospitals was developed, and technical and administrative issues on the implementation were discussed. The participants received TB Infection Control including TemPO strategy lecture and participated in the simulation/ role-play of the patient pathway. The simulation was aimed to get information and feedback on how to integrate TemPO in both hospitals. After that, Panti Rapih hospital in Yogyakarta implemented TemPO on a small scale since April 2015. The implementation has been evaluated and to be used to revise their SOP.

For prisons, TemPO strategy has been inserted into the revised TB in prison guideline and the self-assessment tools.

ii. **TB Health Care Worker Screening**

During APA I, CTB facilitated the screening for 87 health care workers who have frequent contacts with TB patients (DOTS and registration officers) in three (3) PMDT referral hospitals and one (1) hospital in three (3) provinces. But none of them was TB confirmed.

#	Outcome Indicators	Indicator Definition	Baseline (Year/ timeframe)	Target	Result
				Y1	Y1
5.1.3.	#/% of TB IC (i.e. FAST) certified health facilities	<p>Description: This indicator measures the number and percent of health facilities implementing FAST (i.e. based on the criteria of FAST strategy - "Find cases Actively, Separate safely, and Treat effectively"). Note this measurement requires survey of facilities selected through lot quality assurance sampling and by using the 10-item modified CDC monitoring tool (health facility scoring YES on items 2, 4 and 5 is qualified as implementing FAST). Indicator Value: Percent</p> <p>Level: National and Challenge TB geographic areas</p> <p>Numerator: Number of TB IC certified health facilities in the area Denominator: Total number of health facilities in the area</p>	Not available	Not available	<p>CTB areas (10 districts): N/A</p> <p>Intervention will be implemented in APA2</p>
5.1.4.	% of TB service delivery sites in a specific setting (ex, prison-based, hospital-based, private facility) that meet minimum infection control standards	<p>Description: This indicator measures the percent of TB service delivery sites in a specific settings (disaggregated by public and private health facilities) that meet minimum IC standards in line with global guidance. Note this measurement requires survey of facilities selected through lot quality assurance sampling and by using the 10-item modified CDC monitoring tool. Indicator Value: Percent</p> <p>Level: National and Challenge TB geographic areas</p> <p>Numerator: Number of TB service delivery sites that meet minimum IC standards in the</p>	Not available	Not available	<p>CTB areas (10 districts):N/A</p> <p>Intervention will be implemented in APA2</p>

		area Denominator: Total number of TB service delivery sites in the area			
<b>5.1.6.</b>	% change in transmission risk among key populations exposed to new infection prevention strategies	To be measured within the framework of a separate core project in selected countries	N/A	N/A	N/A
<b>5.2.3.</b>	Number and % of health care workers diagnosed with TB during reporting period	Description: This indicator measures the percent of healthcare workers (HCWs) diagnosed with TB (all forms) annually (disaggregated by gender and age). This measurement may require a special study using a validated tool and/or methodology. Indicator Value: Percent  Level: National and Challenge TB geographic areas  Numerator: Number of HCWs diagnosed with TB (all forms) during past year Denominator: Total number of HCWs in the same year	Not available	Not available	CTB areas (10 districts): N/A  Screening TB among health care worker will be implemented in APA2 as part of ICF

### Sub-objective 6. Management of latent TB infection

CTB interventions on LTBI management are following the national policy which aim at two risk groups: children under 5 years and PLHIV and fully integrated with policy of TB active screening and TB ICF strategy. The activity for LTBI were merged with activities on TB screening and TB ICF.

CTB promote integration of LTBI management among those groups into existing policy of childhood TB and TB-HIV. For TB-HIV, CTB continued to support NTP and NAP collaboration of IPT which was a continuation of efforts begun under TB CARE I. IPT started as pilot in 2012 with TB CARE I's technical assistance and became policy in 2014. Although, the results of pilot phase were very impressive, scaling up plan implementation was slow. From 205 IPT participants in 2013, around 1,400 PLHIV participated on IPT in 2014. The goal of CTB is to help scale-up implementation of IPT among ART clients.

#### **Key results**

##### iii. **IPT for children**

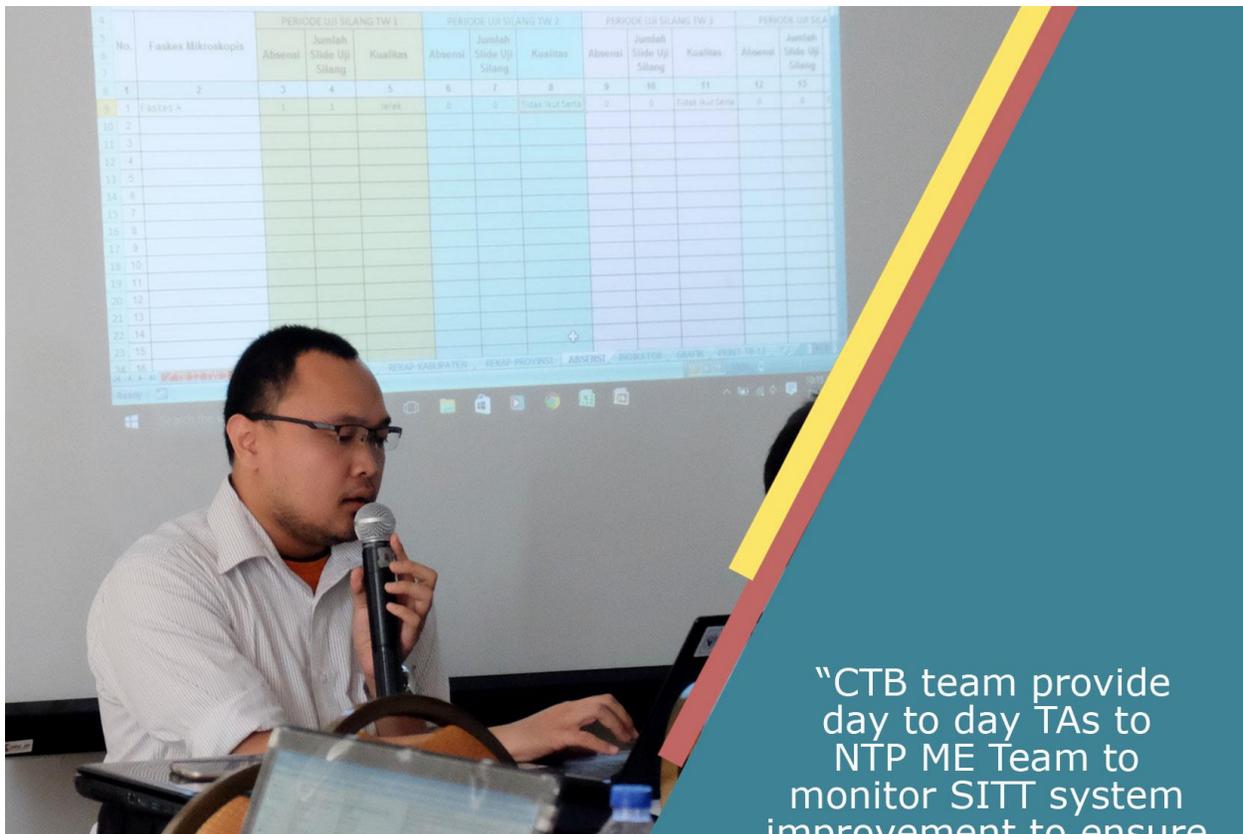
The CTB supported Childhood TB National action plan and Program review addressed the IPT provision for children at risk of TB. Main key intervention under the action plan is "Increase TB prevention in children by provision of INH prophylaxis through community based contact investigation and good infection control".

iv. **IPT for PLHIV**

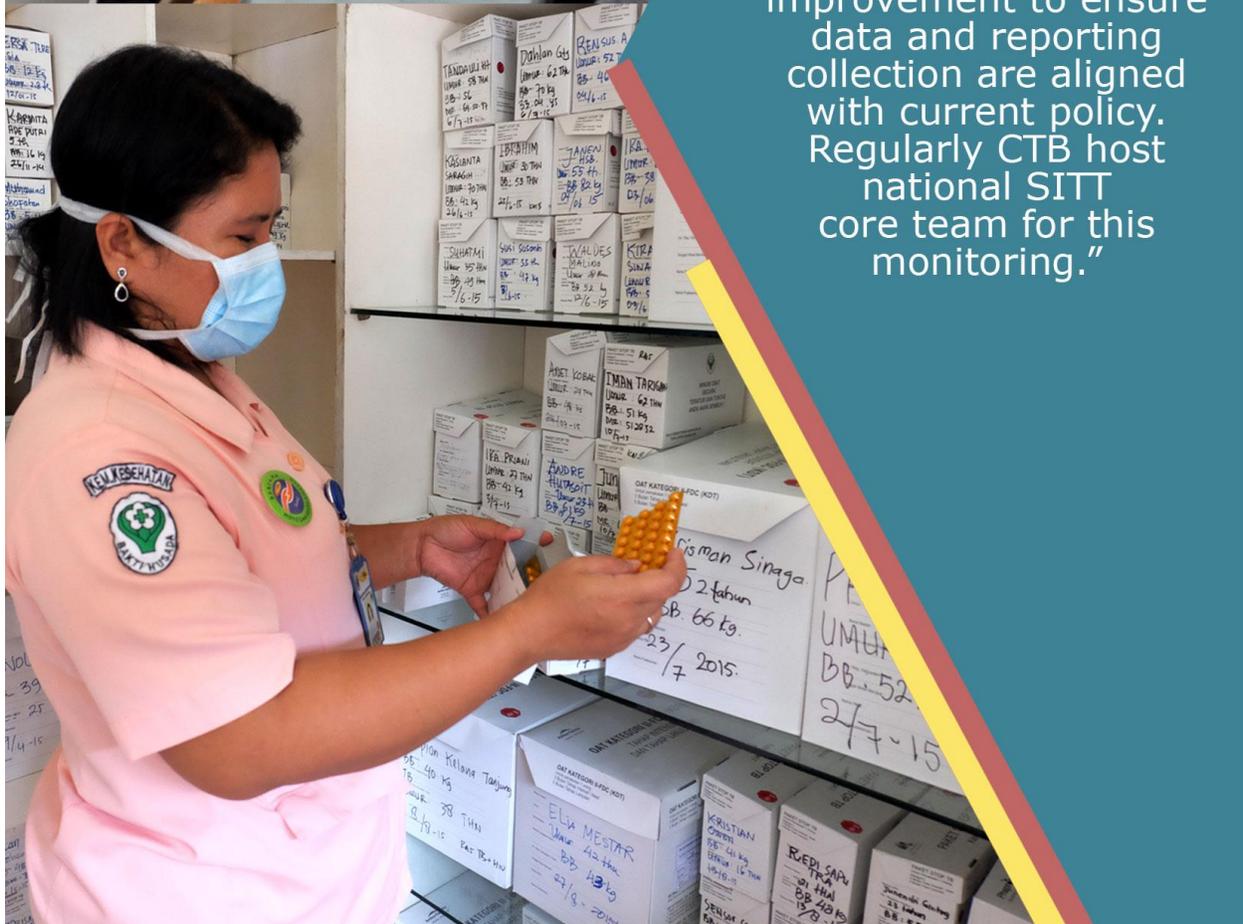
In CTB districts, among 27 ART referral hospitals, nine (9) of them implemented IPT in 2015. In those nine (9) hospitals (in 5 districts), there were 452 PLHIV who were eligible for IPT based on the screening in 2014-2015 and among them, 164 were started IPT on 2014 and 121 PLHIV were started IPT on 2015. While the recording system of IPT during the pilot phase was very good, including recording of completion rate, failure, loss-to-follow-up according to specific reasons, during national implementation NAP and NTP requires only recording the number of participants starting on IPT. The completion rate in each hospital could not be captured from the national information system. CTB will work with each IPT hospital to gather this additional data with NAP endorsement.

Another reason IPT scaling up has been slow is because of the limit in INH supply and setting of low target of IPT per province (200 participants/ province). This year, NTP and NAP agreed to increase the target per year from 2016 onwards. And finally, some clinicians are reluctant to start IPT due to perception of mono-resistance of INH. CTB plans to address this issue via the support of the Pulmonologist Association to convince the clinicians.

#	Outcome Indicators	Indicator Definition	Baseline (Year/ timeframe)	Target	Result
				Y1	Y1
6.1.2.	% of eligible persons completing LTBI treatment, by key population and adherence strategy	Description: This indicator measures the percent of eligible persons completing LTBI treatment, by key population and adherence strategy according to national policy Indicator Value: Percent Level: National and Challenge TB geographic areas Numerator: Number of eligible persons completing LTBI treatment Denominator: Total number of eligible persons	Not available	Not available	Not Available  IPT for PLHIV just started as pilot project.



“CTB team provide day to day TAs to NTP ME Team to monitor SITT system improvement to ensure data and reporting collection are aligned with current policy. Regularly CTB host national SITT core team for this monitoring.”



## Objective 3. Strengthened TB Platforms

### Sub-objective 7. Political commitment and leadership

The National TB program is currently still relying heavily on external funding sources. In 2012, 66% of TB program funding was coming from the Global Fund (based on Program Nasional TB report, 2013) plus some contributions from USAID. While this has slightly shifted (according to the financial gap analysis in the GF NFM CN 2016-2017 it is reported that domestic funding for TB is now around 60%) external funding for TB is still playing an important role. There are expectations that the government may increase budget allocations and issue TB-related policies to support the successfulness of National TB Program. In relation to the efforts, CTB facilitated and is involved in advocacy activities and development of TB-related regulations. Moreover, CTB periodically disseminates the information of TB program to stakeholders, and communities in form of CTB bulletins and social media funpage.

#### **Key results**

##### i. **CTB supported World TB Day Commemoration 2015**

One of the events that can be used to make a campaign on TB is through World TB Day commemoration. CTB supported several events such as:

- A blogger workshop for extensive TB promotion in the blogger community. Forty bloggers participated in this workshop. The blogger community was established during the workshop with the expectation that they will convey TB awareness to the community. Beside that, a hashtag #sahabatJKN #lawanTB was created and twittered by more than 2,000 tweets, and 42 writings about TB were posted on blog and facebook sites. Furthermore, 6 bloggers performed a poem to emphasize public awareness about TB stigma during National TB Symposium, which was attended by the Minister of Health.



**Figure 9: Minister of Health and DG CDC taken picture in CTB-KNCV booth**

- The peak of World TB Day commemoration was conducted on 24 March 2015 at the palace of the Vice President of Indonesia, H.M Jusuf Kalla. During this event, the National TB Strategic Plan 2015-2019 was officially launched. Vice President Kalla emphasized that TB awareness should be promoted nationwide, and all local governments should provide continuous support to the TB control program.
- The National TB Symposium was conducted on 28 March 2015 in Jakarta with almost 1,200 participants. Challenge TB participated in providing an exhibition booth with main activities including: photo session, dissemination of TB materials, and a TB knowledge survey. A total of 335 participants signed up at the CTB booth and 192 participated in the TB knowledge survey.



**Figure 10: Bulletin "Challenge"**

##### ii. **Strengthened CTB Media and Communication**

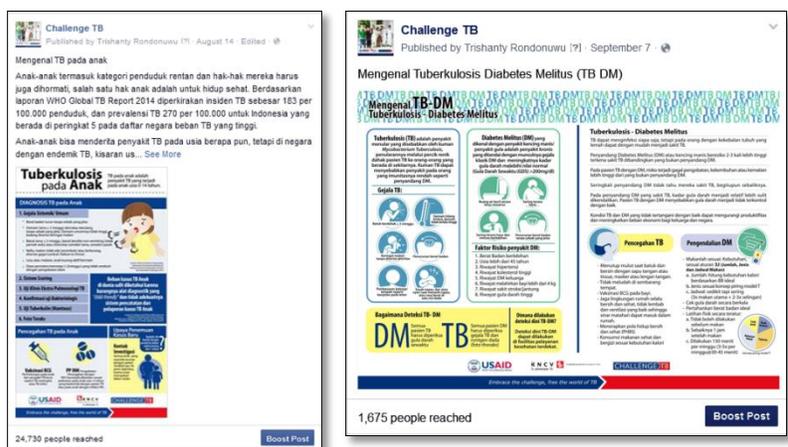
In APA I, role of media and communication was strengthened and became an instrument for the

dissemination of TB/Challenge TB messages and values. It was also helping to shape public opinion and underlying sentiment about TB.

Since May 2015, Challenge TB already developed two quarterly bulletins, named Challenge. Printed 500 exemplars/edition. Printed copies of the bulletin were distributed to stake holders, partners, patients groups, organization profession, and some health facilities. The electronic copies are available in KNCV website (kncv.or.id).

CTB also use social media platform to communicate and engage with the public and to create brand awareness. Currently, CTB Indonesia has facebook, instagram and twitter, and the strongest one is facebook.

CTB Facebook<sup>6</sup> platform published around 60% content of Challenge TB's activities and 40% original and curated content that provides value and knowledge about TB. From Facebook Insights, there were 2 post types are "best" based on performance. As it shown in performance metrics used are Reach, Post Clicks and Likes, Comments & Shares. The first post is **"Tuberkulosis pada Anak" (Childhood Tuberculosis) reached 24,730 people and 571 shares.** The second one is **"Mengenal Tuberculosis dan Diabetes Melitus" (Tuberculosis and Diabetes Mellitus) reached 1,675 people and 55 shares.** From that insights indicated that people is still interested to know more about TB, especially childhood TB.



**Figure 11: Two highest ranked article on CTB –Indonesia Social Media**

#	Outcome Indicators	Indicator Definition	Baseline (Year/ timeframe)	Target	Result
				Y1	Y1
7.2.1.	% of NTP budget financed by domestic resources	Description: This indicator measures the percent of the NTP budget financed by domestic sources Indicator Value: Percent Level: National Numerator: The amount of NTP expenditures from domestic sources during reporting period Denominator: Total NTP expenditures in the period	Not available	Not available	National:  Awaiting information from NTP

**Sub-objective 8. Comprehensive partnerships and informed community involvement**

CTB provide TA for development of National Strategic Plan 2015-2019 and Concept Note, implementation of GF work plans and GF funded TA plan, including reprogramming GF work plan through CCM, TB/ HIV technical working groups and PR/SR mechanism. CTB partners also provide TA for implementation of GF work plans at national and provincial level, Supporting TWG (including

<sup>6</sup> Fanpage CTB Indonesia : [https://www.facebook.com/CHALLENGETB.INDONESIA?ref=aymt\\_homepage\\_panel](https://www.facebook.com/CHALLENGETB.INDONESIA?ref=aymt_homepage_panel)

PUDRs, management letters, supervision, M&E, etc.) Monitoring and troubleshooting, implementation of GF funded TA plan and reprogramming GF work plan. CTB partners also accountable to provide technical inputs to GF PFM and country team as well.

 **Key results**

i. **National Strategic Plan 2015–2019**

During the TB Day Celebration, taking place in Vice President office, the National Strategic Plan 2015–2019 was officially launched. CTB provided support on the development of NSP, especially for epidemiological burden, gap analysis, target settings, strategy and approach formulations and ME surveillance parts of NSP. The national strategy articulates an ambitious agenda set out by the National Tuberculosis Control Program (NTP) and all of its partners to make significant progress toward the long-term goal of creating a TB-free Indonesia by 2050.

ii. **CTB support on Global Fund activities**

- TB-HIV joint concept note for NFM was submitted in time for window 6. The concept note was developed by Country Coordinating Mechanism Indonesia, and supported by MoH, Challenge TB partners (FHI360, KNCV, MSH and WHO), Gadjah Mada University and several external consultants.
- The GF TRP (Global Fund Technical Review Panel) has accepted Indonesia’s joint concept note on TB and HIV and recommended that the TB-HIV concept note proceed to grant-making with some issues needing to be cleared by the TRP and CCM Secretariat.
- The Global Fund has awarded the full requested allocation amount of US\$ 132.2 million plus US\$ 97.5 million in incentive funding. Overall the TRP considers the concept note to be technically sound and strategically focused, well-integrated considering the country’s epidemiological context, geographic variability of the two diseases, current funding landscape and limitations, and utilizes the lessons learned through programs supported by the Global Fund and other development partners to prioritize evidence-based and high impact interventions for key populations.
- CTB provide technical supports to cleared all TRP and secretariat comment before GAC II process, as well as finalization of detail budget, Performance Framework and Implementation mapping analysis. All issues have been cleared except the over ceiling budget issues for both TB PRs.
- The NFM grant signing anticipated in November and first disbursement will happen in December 2015.
- For current SSF phase II budget, CTB provide TA for reprogramming plan for SSF II year 2 (2015) which is available starting from June 2015.
- GF rating for both TB PRs is improved, PR MOH has fulfilled all of the CP (Conditions Precedent) and 7 out of 11 special conditions so far. PR Aisyiah met all CP and SC. All outstanding and findings from GF management measures are addressed timely

#	Outcome Indicators	Indicator Definition	Baseline (Year/ timeframe)	Target	Result
				Y1	Y1
8.1.3.	Status of National Stop TB Partnership	Description: This indicator measures the status of National Stop TB Partnership by using special questionnaire for collecting relevant country level data	1	Not applicable to set the target	N/A

		Indicator Value: The score based on below: 0= no National Stop TB Partnership exists 1= National Stop TB Partnership established, and has adequate organizational structure; and a secretariat is in place that plays a facilitating role, and signed a common partnering agreement with all partners; but does not have detailed charter/plan, and does not meet regularly/ produce deliverables; 2= National Stop TB Partnership established, has adequate organizational structure and in a participatory way has developed detailed charter/plan, but does not meet regularly and does not produce deliverables; 3= National Stop TB Partnership established, has adequate organizational structure, has developed detailed charter/plan, meets regularly and critical deliverables are produced Level: National			
<b>8.2.1.</b>	Global Fund grant rating	Description: This indicator presents Global Fund TB grant performance rating results Indicator value: Score is based on the following: A1 Exceeds expectations A Good performance A2 Meets expectations B1 Adequate B2 Inadequate but potential demonstrated C Unacceptable Level: National	B1	A1	Aisiyyah : A1 MoH: B1

### Sub-objective 9. Drug and commodity management systems

In APA I, for drug and commodity management systems CTB focused on updating training materials for pharmacists and doctors at all levels, assisting NTP on monitoring, planning, and procurement for second line TB drugs and cartridges, evaluating the logistics recording and reporting system in SITT software (in line with SO 10), and inclusion of new function in the current software. CTB also has supported implementation of Bedaquiline at 3 pilot sites, including Pharmacovigilance (PV) (finalization of PV guidelines, training materials and inclusion of PV in eTB manager software).

#### **Key Results**

##### i. **Training modules and handbook has updated and implemented in CTB areas**

National TB Guideline handbook has been updated and released, as national references of TB treatment and policy. It means that all new policies and regulations and agreements should follow it, including all supporting documents that should also be in line with this national TB Guideline. Based on that situation, NTP revised training module of TB for TB staff in Province and District level.

CTB provided TA for updating process of TB Training Module for province and district level that is conducted on April 14-17, 2015. The training module was expanded to 2 modules based on new curricula and objectives: TB control program, Patient Case finding, TB Treatment, Quality TB Laboratory, Logistic TB, Recording and Reporting, Prevention and Infection control, TB Linkage, Effective Communication, Monitoring and Evaluation, Supervision and TB planning.

These updated training modules have been implemented nationwide.

ii. **Second line – TB Drugs and Cartridges monitored**

CTB provided support to NTP in logistics monitoring like second line TB drugs and cartridges. Analysis of second line TB drugs and cartridges usage has been produced regularly and shared to logistics team and PMDT team in NTP as the main partners through email or in a meeting.

iii. **Cohort Event Monitoring (CEM) Pharmacovigilance for guideline finalized and piloted**

CTB provided supports to NTP, BPOM and Health Facilities to establish active PV system. Funding support for PV introduction came from GF (PR MOH and PR HSS) and CTB. WHO Drug Safety units (both from WHO country and HQ), also provide TA on the planning and capacity building.

CTB has supported NTP and the Food and Drug Agency (BPOM) to finalize the CEM PV guideline and training material. CEM PV Training has been conducted twice. Follows by training for BPOM, PV Officer on eTB manager software. Pharmacovigilance RR was available in eTB Manager. Currently there are five (5) patients on bedaquiline regiment at Hasan Sadikin and Persahabatan Hospital. The speed for patient enrollment is very slow due to high patient refusal and number of patient from outside the pilot areas not well accomodated. Patients from previous failure with DR-TB treatment need more intensive counseling before enrollment.

#	Outcome Indicators	Indicator Definition	Baseline (Year/ timeframe)	Target	Result
				Y1	Y1
9.1.1	# of stock outs per [year] of anti-TB drugs, by type (first and second line) and level (ex, national, provincial, district)	Description: This indicator should be used to report the number of stockouts of any type of TB drug at any level of the health system that results in interruption of treatment. Indicator Value: Number Level: This indicator should be reported at whatever level a stockout that results in interruption of treatment occur	CTB intensified district : NA	0 stock outs	(2014) CTB 10 intensified district: First Line: -Category 1: 0 -Category 2: 2 districts -TB Drugs for Children: 0 Second Line: 0
9.2.1.	# of new and ancillary drug regimens that have become available in country since the start of Challenge TB	Description: The number of new and ancillary drug regimens that have become available in the country through Challenge TB support Indicator Value: Number Level: National Numerator: Number of new and ancillary drug regimens that have become available in the country through Challenge TB support during past year	0	3	National: 3 (Bedaquiline Clofazimine, Linezolid)

## Sub-objective 10. Quality data, surveillance and M&E

Quality data, surveillance, monitoring and evaluation is essential part on TB program to ensure that TB control activities are in line with strategic plan. In APA 1, CTB has provided support to strengthening TB information system (SITT, ETM), TA on developing Drug Resistance Survey protocol and initial preparation for system information support for mandatory notification.

In five (5) CTB intensified provinces, the main approach was providing Technical Assistance on SITT implementation and facilitating SITT updated version workshop. In National level, CTB mainly approach were on the system information improvement, i.e interoperability between eTB Manager (ETM) and SITT, improvement on SITT function, ETM additional feature for pharmaco-vigilance and others. In line with mandatory notifications, in APA I, CTB initiated to develop a user friendly system, which intended to increase case notification from private sectors.

### **Key Results**

#### i. **Improvement on SITT and E TB Manager function and implementation in CTB areas.**

SITT phase 2 is widely implemented without any major technical problems, however security aspect of the system became a great concern. Revision of definition and reporting framework for TB to be included in SITT and list of issues that should be revised in SITT based on new definitions is available. CTB team provided day-to-day TA to the NTP M&E Team to monitor SITT system improvement to ensure data and reporting collection are aligned with current policy. Regularly CTB hosts national SITT core-team for this monitoring. Interoperability between SITT and ETM has been improved. Now on, data for DR-TB presumptive cases from SITT are also visible in ETM. This feature will help NTP to find more DR-TB suspects, diagnosed and then treat them.

At provincial level, CTB has supported PHO by giving technical assistance on SITT updated to 359 facilities within 5 CTB provinces to ensure all staff in public health facilities in CTB districts are skilled to enter the new updated version of SITT with qualified data.

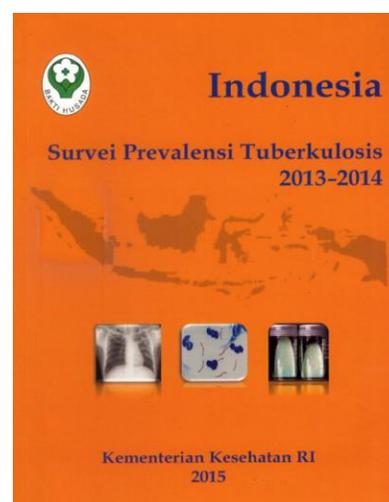
ETM is 100% implemented in 41 PMDT Referral and Sub Referral facilities at National Level. A new function was added to the Lab module through which pharmaco-vigilance reporting and recording is now available since April 2015. Three pilot sites (RS Persahabatan, RS Hasan Sadikin, and RS Soetomo) regularly inputted the PV data in ETM.

#### ii. **National TB Prevalence Survey 2013-2014**

CTB provided TA for finalization of NTPS 2013 final reports (Bahasa Indonesia and English version), the document is final, officially signed, printed and disseminated. The NTPS results are key element for NSP 2015-2019 and NFM CN development. The target setting for both documents were calculated and projected based on NTPS results.

#### iii. **Protocol for inventory study and TB Drug Resistance survey were finalized.**

- The protocol for the TB inventory study was finalized with technical support from Dr Charalampos Sismanidis and national consultant and a plan of action and timeline of the



**Figure 12: Final Report of National Tuberculosis Prevalence Survey 2013 (Bahasa)**

study were developed. Twenty-three districts in 15 provinces are selected to participate in the study. The study aims to include 6,046 TB cases.

- CTB also provided TA for the design and planning of the National wide TB Drug Resistance Survey (by Dr Matteo Zignol). The protocol was finalized and a plan of action and timeline of the study were developed. There are 70 health facilities in 40 districts in 12 provinces selected to participate in the study. The study aims to include 3,200 smear positive TB cases.

#	Outcome Indicators	Indicator Definition	Baseline (Year/ timeframe)	Target	Result
				Y1	Y1
10.1.1.	#/% of PMDT sites reporting consistently via the ERR	Description: This indicator measures the number and percent of PMDT sites reporting consistently via the electronic recording and reporting system (ERR) Indicator Value: Percent Level: National and Challenge TB geographic areas Numerator: Number of PMDT sites reporting consistently via the ERR Denominator: Total number of PMDT sites	100%	100%	National: 100% (41/41)
10.1.2.	#/% of eligible health facilities reporting TB data in real time or at least quarterly via the ERR	Description: This indicator measures the number and percent of health facilities reporting TB data in real time or at least quarterly via the ERR Indicator Value: Percent Level: National and Challenge TB geographic areas Numerator: Number of health facilities reporting TB data in real time or at least quarterly via the ERR Denominator: Total number of health facilities with TB services	Not available	Not available	CTB areas, 2015 (10 districts): 62% (472/765)
10.1.4.	Status of electronic recording and reporting system	Description: This indicator measures the status of electronic recording and reporting (ERR) Indicator value: Score based on below: 0=R&R system is entirely paper-based; 1=electronic reporting to national level, but not patient/case-based or real time; 2= patient/case-based ERR system implemented in pilot or select sites (TB or MDR-TB); 3=a patient/case-based, real-time ERR system functions at national and subnational levels for both TB and MDR-TB; 4= a patient/case-based,	3=a patient/care-based, real-time ERR system functions at national and subnational levels for both TB and MDR-TB	3=a patient/care-based, real-time ERR system functions at national and subnational levels for both TB and MDR-TB	3=a patient/care-based, real-time ERR system functions at national and subnational levels for both TB and MDR-TB

		<p>real-time ERR system is functional at national and subnational levels for both TB and MDR-TB completely and meets WHO standard for TB surveillance data quality - i.e., data in the national database are accurate, complete, internally consistent, within timelines set, validated and free of duplicates and a data quality audit system is put in place (source: Standards and Benchmarks for Tuberculosis Surveillance and Vital Registration Systems – Checklist and User Guide, WHO, 2014). Level: National</p>			
<b>10.2.1.</b>	<p>Standards and benchmarks to certify surveillance systems and vital registration for direct measurement of TB burden have been implemented</p>	<p>Description: National TB surveillance system is certified based on WHO standards and benchmarks for TB surveillance and vital registration systems (for paper-based or electronic systems). For a country's TB surveillance systems to be certified as providing a direct measurement of TB cases and TB deaths, all 10 standards and their associated benchmarks (Part B, Section 1) should be met (source: Standards and Benchmarks for Tuberculosis Surveillance and Vital Registration Systems – Checklist and User Guide, WHO, 2014). The country standards and benchmarks score will be monitored as a sub-indicator to track progress. Indicator Value: Yes/No Level: National</p>	Not available	Not available	No activities were planned for this indicator

## 4. Challenge TB Support to Global Fund Implementation

### Current Global Fund TB Grants

Name of grant & principal recipient (i.e., Tuberculosis NFM - MoH)	Average Rating*	Current Rating	Total Approved Amount	Total Disbursed to Date	Total expensed (if available)
IND-T-AISYIYAH 2014	A2 – meets expectations	A1 - Exceeds expectations	\$9,598,184 (signed) \$5,395,919 (committed)	\$4,659,117	Not available
IND-T-MOH 2014	B1 - Adequate	B1 - Adequate	\$100,066,925 (signed) \$79,038,223 (committed)	\$68,353,700	Not available

\* Since January 2010

### In-country Global Fund status - key updates, current conditions, challenges and bottlenecks

The current SSF Grant Phase 2 is titled “Accelerating Progress Towards Universal Access to Quality DOTS”. The grant period will end on 31st December 2015. The SSF project is implemented under two principle recipients (PRs): the Ministry of Health (MoH) with a total signed amount of USD 100,066,925 (USD 79 million committed), and a large local faith based organization (FBO) named Aisiyiah (representing several CSOs), with a signed amount of USD 9,598,184 (USD 5.4 million committed).

The most recent performance of MoH is rated “adequate” (B1) and PR Aisiyiah “exceeds expectations” (A1). While there are still several outstanding management actions, the GF has acknowledged the good progress made by the PRs and their partners in addressing issues noted in previous periods.

Since 2002 the TBCTA coalition has successfully assisted the NTP Indonesia in drafting of 5-Year Strategic Plans, and based on this, development of six GF Grant proposals (for Round 1, 5, 8, 10, 2 SSF and the new NFM grant 2016-2017). All proposals were approved.

#### NFM grant 2016-2017

The joint TB-HIV Concept Note for NFM, submitted in April 2015 was approved and is currently in the grant agreement negotiation phase. The CN was based on the epidemiological impact assessment, latest National Prevalence Survey, and the recently developed National Strategic Plan 2015-2019. These documents were the key references for the request for new funding. All current in-country CTB partners in Indonesia, supported by external experts, were actively involved in development of the concept note strategy.

**Table 11: Priority modules and key interventions of NFM CN 2016-2017 at a glance**

Module Name	Key Interventions
<b>Prevention programs for MSM and TGs</b>	Peer to peer and social media-based outreach, structural intervention, condom and lubricant distribution, mobile and population friendly HCT and STI services focus in 50 urban districts with high number of highrisk MSM and TGs.
<b>Prevention programs for sex workers and their clients</b>	Sex workers and HRM organizing peer-to-peer outreach and peer leader approach, ICT-based outreach, subsidized and self-paid condoms and lubricants distribution, continue structural intervention (PMTS) in hot spot and establish new one for male worker in seaport, mobile and population friendly HCT and STI services, and enabling environment intervention
<b>Prevention programs for people who inject drugs (PWID) and their partners</b>	One on one outreach with integrated sexual and injecting drug transmission, and rights based information, more intensive HCT and STI services through mobile service and referral system, needle sterile program, OST with psychological and family support, facility and community based addiction recovery
<b>PMTCT</b>	Support district authorities for primary prevention (prong 1), integrated IEC approach with family planning program for prong 2, HCT to all pregnant women and EID for the infant born from PLHIV mother in SUFA districts for preventing vertical transmission (prong 3), and Prong 4 will follow TCS module
<b>Treatment, Care and Support</b>	Improving access and quality by increasing number and distribution of facility based services for HCT, STI, ART and treatment monitoring including frequency of mobile services and EQAS of laboratory diagnostic. Continue Procurement and provision of ART, OI, STI and prophylaxis drugs and expand number of satellite for ART. Empowering PLHIV who know their status through home visit and psychosocial support from peer counselor, PLHIV FGD and study clubs
<b>TB care and prevention</b>	Expanded case detection and ACF focusing on high risk KAPs, prisoners, MDR (see later), HIV associated-TB patients, pregnant women and diabetics; in priority SUFA districts, diagnosis using rapid molecular diagnostic tools; contact tracing and IPT focusing on the childhood contacts of all infectious cases; development of TBCM to ensure complete case notification and PPM activities.
<b>TB-HIV</b>	Implementation of TB-HIV collaborative activities at national and sub-national levels including coordinating mechanisms for HIV-TB, HIV testing of TB patients; TB screening in HIV patients; early initiation of ART and CPT in co-infected patients; IPT for HIV patients with TB contacts.
<b>MDR TB</b>	Early case detection using rapid molecular diagnostics in SUFA focused districts; provision of second-line treatment for MDR TB patients; including enablers for social and living support; DOT for all patients; lab monitoring; infection control.
<b>Health Information systems and M&amp;E</b>	Upgrading individual program reporting mechanism through ICT base and gradually alignment with HIMS, and Ensure reliability, validity, accuracy, completeness, and timelines of data through periodic quality checks, data verification from facilities level up to central level, and regular supervision
<b>Removing legal barriers to access</b>	Increase awareness on rights based approach to HIV services among related stakeholders through advocacy workshop and training. Establish paralegal services and collaboration with legal aid organization, and develop to support integration of HIV and violence services as well as right-based and gender sensitive intervention
<b>Community systems strengthening</b>	Community-based monitoring for accountability: Advocacy for social accountability: Social mobilization, building community linkages, collaboration and coordination; Institutional capacity building, planning and leadership development in the community sector
<b>Program Management</b>	Collaborative activity meetings of stakeholders at all levels national to district; performance based incentives to improve technical and financial reporting; expansion of warehousing and distribution capacity

CTB and GF support are inextricably linked: both are essential to successfully achieve the goals and objectives of the NTP. While CTB continues to focus on piloting of innovations and finding solutions, the NFM concentrates on program operations and nationwide scaling up of the new initiatives.

### Strengths:

The synergy between GF funding and TBCTA technical support has resulted in successful introduction and subsequent expansion of several new initiatives, including Hospital DOTS linkage and PPM, expansion of the laboratory network for culture and DST, PMDT, Infection Control, GeneXpert etc., whereby USAID funding was used to develop and pilot the new interventions, after which GF funding supported roll-out and further expansion based on lessons learnt.

**Challenges and weaknesses:**

Major challenges for successful GF implementation include:

- Chronic shortage of human resources to support implementation of all new initiatives (PMDT, TB-HIV, laboratory strengthening) due to high turnover and zero growth policy of the GoI.
- Subsequent low absorption capacity resulting in low achievement of targets and down-grading of the grant.
- Managerial risks not/ only partly being addressed (limitations in financial management etc.)
- Dependency on incentive funding resulting in risk for continuity when activities are shifted from GF budget to local budgets (APBN/ APBD)

**Challenge TB involvement in GF support/implementation, any actions taken during Year 1**

The main approach for GF implementation in Indonesia is based on capacity building in specific technical and managerial areas of the PRs and sub-recipients (SRs), and assuring that all assistance is complementary to the support provided by other sources, including GF. Local and international consultants are providing technical support in selected areas with the objective to train and coach national technical officers and assist the NTP in troubleshooting and problem solving. This support has been realized through country visits and on-distance assistance.

- The coalition supported PR – MoH to develop and update country profiles for the TB procurement plan, specific action plans for technical areas of the grants, re-programming, performance frameworks, M&E plans and addressing the Global Fund’s SSF conditions.
- Financial management assistance was provided to strengthen the NTP’s financial management system as a requirement for Grant Renewal (SSF). An in-depth assessment of the NTP's financial management system of PR and sub-recipients was conducted and a plan was implemented to improve the financial management system. This contributed to an increase in rating from B2 to B1. This support will be continued in the coming period.
- Furthermore CTB assists PRs and SRs in addressing managerial and oversight risks, Special Terms & Conditions and Conditions Precedent. This includes strengthening logistics management for procurement, managerial trouble shooting and tackling bottlenecks, (e.g. addressing GF management letters, etc.).

## 5. Challenge TB Success Story

### **DR TB Patient Empowerment .** **- Ex-patient - as part of CCM group.**

“Humanizing Human”



Is how, Mr Budi Hermawan pointed out, TB patients should be treated. “It such a shame that we get mistreated by health workers because they know that we are TB patients”. Mr Budi made this statement based on his experienced being rejected to enter one of the hospital, because they knew that he was a TB patient. “At that time, I was already in my 17<sup>th</sup> month of treatment, so I was in my conversion stage, but they did not let me in, because the room is air conditioned.” That kind of situation has become his concern, since many of his peers also get same

treatment elsewhere.

Mr Budi was first diagnosed with TB in 2003. The doctor only said that he needs to come back, if the medication is finished. “In my opinion, we come to the doctor when we are sick, so at that time I was in my fourth month of treatment and I already felt much better, so I did not return to the doctor.” Consequently, about a year later Mr Budi suffered a relapse of his illness so that he needed to undergo the same treatment again. He had all the treatment but unfortunately developed a form of liver failure in his 7<sup>th</sup> month of treatment so that he required to be hospitalized and discontinue the treatment. “In 2007, my condition was getting worse, so I underwent the same treatment, and from my sputum result, I was diagnosed with drug resistant TB. The only way that I could be cured now was to undergo lung surgery and remove the infected lung, which is cost IDR 150 million at that time” said Mr Budi. From that time Mr Budi discontinued the treatment.

Finally in 2011, Mr Budi was informed by Dr Alvin, his former doctor from RS Paru Dr M Goenawan Partowodigdo Cisarua – Bogor, that there was a new program from Persahabatan Hospital, Jakarta that could help him to get cured. “One of the requirement is I have to go to the hospital everyday to take the medicine, which is a problem for me, since I live in Bogor not in Jakarta” added Mr Budi. He went with the treatment and stayed for 17 months in a rented room before he returned back home again.

An excruciating 19 months journey where he had to swallow up to 20 pills a day and receive a painful injection for the first six months is now over. Now, Mr Budi Hermawan is a facilitator, a role model, and vice president of PETA (Pejuang Tangguh/Strong Survivor). PETA is peer educator group located in Jakarta. Peer educator groups were introduced as a part of patient support approach, and were published in November 2014 by KNCV. Peer educator groups help MDR-TB patients get knowledge, support and encouragement from other former MDR-TB patients. Mr Budi is also a member of the CCM (Country Coordinating Mechanism) since 24<sup>th</sup> February 2015. His role in the CCM is to provide an input from patients’ side, enforce patients’ involvement in planning, budgeting, implementation, and monitoring.

## **MDR-TB Ex Patient voice in USAID forum, Washington**

"Affirmation". What people want more than anything else is focused attention. They want to know that their thoughts matter, that their lives matter, that they are valuable. Ms Ullly Ulwiyah, 28 years old, survivor of MDR-TB who is also Chairwomen of the PETA (Strong Survivor) organization received her affirmation when she spoke at USAID's World TB Day event, "Reach, Cure, Prevent," at the US Institute of Peace, Washington DC on March 24<sup>th</sup>, 2015. In her final statement, she expressed her thanks to her family and fellow PETA members for their support, and the Ministry of Health for its collaboration with USAID on MDR-TB treatment.

Ms Ullly become ill with TB when she was a little girl, at 10-year-old she has been coughing up blood. Since their parents did not have sufficient information regarding her illness, Ms Ullly did not get any treatment. Until one day, her aunt who is a midwife gave Ms Ullly medicine for her to consume until 6 months because she saw something not right in Ullly's appearance. That was the time when Ullly started to receive proper treatment, but lack of information and supervision made her discontinue drinking the medicine in her 4<sup>th</sup> month of treatment. "If my mom asked me whether I already drink my medicine, I said yes, the truth is I threw the medicines away" said Ms Ullly. Relapses keep happening until May 2011, when Ms Ullly was diagnosed with MDR-TB. From that moment Ms Ullly started her 22 months treatment in Persahabatan Hospital and on March 15<sup>th</sup>, 2013, Ms Ullly is cured from MDR-TB. "I am so grateful that there are medicines for my illness and I can be cured", said Ms Ullly.



As of 2014, Ms Ullly became a chairwoman of PETA (Strong Survivor) along with former MDR-TB patients they actively provide information, education and support to newly MDR-TB patients and patients lost-to-follow-up. "Our experience can help them to realize that what they are experiencing now is only temporary, they will get stronger, healthier and happier when they are finishing the treatment".

### **🚩 TB- DM Collaboration, a path to togetherness in TB- DM control.**

#### **Background of TB-DM**

Diabetes Mellitus (DM) is among the three leading causes of death in Indonesia (6.7%) after stroke (21.1%) and heart disease (12.9%). Only about 30% of patients with DM are diagnosed in Indonesia and only 2/3 are undergoing treatment, both pharmacological and non-pharmacological and only 1/3 have well-controlled treatment.

DM affects human immune system, which then may increase the possibility of TB infection and higher Mycobacterium load. People with diabetes have 2-3 times higher risk of being infected with TB. Based on Sample Registration Survey 2014, TB was the fourth leading causes of death in Indonesia.

A total of more than 10% of TB patients are DM patient, so that with the increasing number of DM patients, the number of TB patients will also experience increased very high. People who have comorbidity of TB and DM have 4 times higher risk of death during TB treatment due to the delay in the conversion of sputum culture. They even have higher risk of being relapse after the completion of TB treatment.

Results from TB-DM registry conducted by NIHRD in 2014 showed that of 740 TB cases registered at 7 hospitals in Indonesia, 14.9% (110 cases) also suffer from DM. This finding is similar to the result from a study conducted by Alisjahbana et al, which found 13% of TB patients suffered from DM. In this registry, microbiological examination results showed that 82.7% of patients with TB-DM had

positive smear results while only 49.2% of patients TB without DM had positive smear results. Forty two percent of patients with TB-DM showed positive culture results whereas only 21.3% of patients TB without DM had positive culture results. Twenty percent of patients with TB-DM showed resistance to rifampicin and only 9.4% patients TB without DM showed similar resistance.

### **Process of Collaborative Activities TB-DM**

1. There is a TANDEM research being conducted in Romania, Peru, South Africa, and Indonesia from 2013 – 2017. The research will define the optimal and most cost-effective ways of screening TB patients for DM, and determine the prevalence of DM among TB patients and of TB in DM patients. With regards to treatment, TANDEM will determine the level of DM management required during and after TB treatment, the safety, and pharmacokinetics of metformin when combined with rifampicin, and the effect of hyperglycemia control on TB treatment outcome. This project is expected to have significant impact both in improving basic knowledge on the link between TB and DM, as well as on prevention, therapeutic management, and prognosis of TB-DM.

2. Preparation of TB-DM Screening Protocol in hospitals and trial implementation of TB screening in patients with Diabetes Mellitus (DM) and screening for diabetes in TB patients, conducted in Adam Malik Hospital (North Sumatra), Labuang Baji Hospital (South Sulawesi) and the Dr Kariadi Hospital (Central Java) in 2014. Results and lessons learned from these trials form the basis of algorithms guide for the management of TB-DM in referral level of health care facilities.

3. Department of Community Medicine, Faculty of Medicine University of Indonesia (FKUI) in cooperation with WDF have done the implementation of early detection and management of TB-DM integration in the primary services for 3 years from 2013 to 2015 in approximately 50 clinics in five cities, namely Jakarta, Manado, Bogor, Kupang, Ternate.

4. The Ministry of Health in cooperation with professional organizations and other partners have done:

- Surveillance of TB-DM in primary level of health care facilities.
- TB-DM Register by Balitbangkes (Health Research & Development) MoH RI
- Preparation of the TB-DM Management Guideline in FKTP aims to promote early detection of TB-DM patients in primary level of health care facilities.
- Preparation of Technical Guidelines for TB-DM in referral level of health care facilities aims to make an integrated management system for TB-DM in hospitals as an advance treatment of TB-DM patients based on patient centered approach.

5. Discussion on the development of TB-DM consensus between Ministry of Health and related stakeholders, such as professional organizations (PAPDI: Indonesian Society of Internal Medicine, PDPI: the Indonesian Society of Respiriology, IDAI: Indonesian Pediatric Society, PERKENI: the Indonesian Society of Endocrinology, PERPARI: the Indonesian Society of Respiriology & Critical Care, IDI: Indonesian Medical Association) and other stakeholders. This consensus meeting was held on 26 August 2015. It resulted a TB-DM consensus, which is used as the reference for health personnel in the management of TB-DM in all health care facilities.

### **PMDT Microtraining for District Health Office, an effort to build self-reliance on DR-TB treatment.**

The infection of DR-TB disease in East Java is spreading almost to all districts, it includes the MDR-TB cases. It shows an increase growth from year to year, 32 cases/confirmed in 2009 to 290 in 2014, with 198 treated in 2014 in the East Java referal/ subreferral hospital. To improve the programmatic management of MDR-TB patients, and also to address some issues (i.e. limited number of health care workers in referral hospitals, distance from patients home to referal hospital, transportation cost for patients) on retaining the MDR-TB patients to complete the treatment, it forced

the East Java Provincial Health Office together with CTB to find alternative solution. One of the solution was by creating a micro training for 38 TB field officers (wasor) who will later on responsible of providing the on-the-job training for public health workers.

The aim of the training are: 1) as the exit strategy when the donors stop their support on providing the transportation reimbursement; 2) to build patients reliance to complete their treatment for 2 years on the nearest public health facility (*puskesmas*); 3) to build the capacity of health care workers, especially on monitoring MDR-TB patients in their area and providing support to the patients.

There were some parties involving on the preparation and implementation of the micro training, they are: the Province Office of Health, District Office of Health, satellite public health facilities, MDR-TB referral hospitals, and Challenge TB. Each party has their roles, such as the development of policy and guidelines for Province Office of Health, selecting the *puskesmas* as the MDR-TB satellite health facilities for District Health Office, and preparing the health workers as the training participants for satellite *puskesmas*. While, the significant roles of the referral hospitals are: to receive the patients, provide the diagnosis and medicine, and also monitoring and reporting of the patients progress on the treatment completeness into the eTB Manager portal.

During the first batch of the training, there was no major difficulties unless to familiarize with the new training curriculum. Some feedback have been noted for the training development, such as the timing for the training to be modified from 2-3 days training to become 1 day training and to be conducted after office hours.

It was not just the training attendees who received a capacity development, but also the patients as the end beneficiaries received the impact of the training. They don't feel burden by the transportation cost anymore to complete the treatment because they can go to the nearest *puskesmas*, rather than to the referral hospital which usually farther away. Patients' satisfaction towards health workers' services also improve, they feel accepted by the *puskesmas*. Districts government officials are now have their self-reliance on monitoring the progress of MDR-TB cases in their area, either complete the treatment or cured, which showed a decreasing of DO patients. This situation has helped the referral hospitals on monitoring the MDR-TB patients one by one.

Gradually after the training, the wasors accompanied by TO CTB were able to manage the patients desentralization from referral hospital to satellite *puskesmas* in their area. Also when they conducted the *puskesmas* supervision, it was already discussed during the training on how to modify the *puskesmas*' room clinics to be in line with the IC standardization. To improve the quality of MDR-TB patients, both the disciplinary of the patients to complete the treatment and to build the capacity of the health care workers, the IEC (Information, Education, and Communication) materials were redistributed.

As the result of the first batch of micro training there were 20 districts in East Java already conducted 84 MDR-TB patients desentralization to 56 satellite *puskesmas* during October 2014 – September 2015. There is a big budget cut also as the result of the patient desentralization. Previously it was conducted by a team consisting of 1 CTB Technical Officer, 1 official from referral hospital, and 1 district wasor for 2 days micro training. The total cost to conduct a micro training was IDR 3,520,000 and it became IDR 197,120,000 for all 56 satellite *puskesmas*.

Now, by desentralizing the patients to the nearest *puskesmas* as the result of the micro training, the budget efficiency is as amount as IDR 188,720,000. It happens because the wasors are now able to conduct the micro training by themselves. Only 1 person now needs to conduct the micro training, instead of 3.

Item	Before	After
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	Unit Cost	Person	Day	Total	Unit Cost	Person	Day	Total
<b>Perdiem</b>	410.000	2	2	1.640.000	-			-
<b>Land Transport</b>	170.000	2	2	680.000	-			-
<b>Local Transport</b>	150.000	2	1	300.000	-			-
<b>Local Transport for Wasor</b>	150.000	1	2	300.000	150.000	1	1	150.000
<b>Accommodation</b>	600.000	1	1	600.000	-			-
<b>Total</b>				<i>3.520.000</i>				<i>150.000</i>
<b>Total Cost for 56 PMDT satellite</b>				197.120.000				8.400.000
<i>Total Budget Efficiency: IDR 188.720.000</i>								

Aside from budget cut, there was decreasing on the number of DO patients contributed from those approach, from 45 patients during Oct 2013 – Sept 2014 became 25 patients during Oct 2014 – Sept 2015. One factor causing this decrease was the improvement monitoring and patient accessibility to the MDR health facility.

## **6. Operations Research**

CTB will implement Operational Research in APA 2, i.e Operational Research for TB screening among selected high risk groups (elderly, male smokers and ex -TB patients). The result expected to be available in APA 2.

## **7. Key Challenges during Implementation and Actions to Overcome Them**

CTB work plan for APA1 principally has been finalized in March 2015, which means it has been in place for implementation for 6 months effectively. Starting in July, staff also made a start with the development of the APA2 strategy and planning. Apart from developing 5 years and annual strategies, CTB also faced a tight schedule and also quite time consuming processes to support the development of the National Strategic Plan and the GF Concept Note. Above context resulted in a delay of the implementation of APA1, but all staff has been very instrumental in reducing this delay as much as possible by a more than full time input and delegation of tasks to specific team members.

Furthermore, the transition from TB CARE I to CTB was accompanied by changes in strategy, management, and roles of TOs. This resulted in new challenges for the CTB management, including various vacancies that were difficult to fill and the need to increase the capacity of technical staff as their specialised positions as PPM or PMDT or TB-HIV experts were transformed into the position of TB Technical Officers (TO). To overcome these challenges, CTB continuously conducts internal coordination, provides TB training for newly recruited technical staff, and plans to conduct comprehensive internal TB-related training.

Another challenge is found in trying to change the NTP and PHO paradigm related to the CTB approach, which will focus on implementation at district level. To overcome this challenge, CTB gradually implemented an exit strategy during APA1 by limiting the provision of technical assistance in provincial level or outside the CTB intensive districts, and continuously coordinating the new CTB approach, which focusses on creating new approach models at the district level.

The key challenge related to TB-HIV can be defined as coordination between the two vertical programs, TB and HIV. Even though progress has been made by having the two programs work more closely together, the collaboration still needs further strengthening. One important leverage point is the fact that CTB also supports the implementation of GF activities and, from year 2016 onwards, the NTP and NAP will have to work closely and monitor/evaluate the progress together to meet GF expectations. CTB expects that the coordination/collaboration on TB-HIV activities in the CTB districts will be improved for this reason.

## **8. Lessons Learnt/ Next Steps**

Following the results and findings of the National Prevalence Survey 2013, which quite surprisingly showed that the prevalence is 2.5 times higher than expected - and thus only a third of TB cases were registered/found- it was concluded that the approach to case finding needed to be revised; Case finding should be more active and targeting risk-groups with a strategy that supports and includes all service providers mandated to report TB.

In addition, MDR-TB has become a heavy burden, where the cost for the treatment of one MDR-TB patient being almost 10 times more than for drug-susceptible TB. Other challenges identified were the low enrollment rates (73% at 5 provinces CTB) and a treatment success rate of only 56% (5 provinces CTB). Therefore, maintaining the quality of DOTS, and, most importantly, ensuring a stronger commitment from all parties involved is crucial. This commitment is not only required from TB program implementing stakeholders (NTP, PHO, DHO), but also from local governments, service providers including professional organizations, and the patients themselves.

Lessons learned from the encountered challenges during APA1 of CTB are addressed in below strategy:

**- Case detection through quality assured bacteriology (Intervention area 2.1)**

CTB will assist NTP to expand Xpert machines to support the Intensified Case Finding. The Xpert machines will be introduced beyond their primary current placement within hospitals and laboratories serving PMDT sites into the intermediate reference laboratory level. CTB will therefore leverage the purchase of Xpert machines through a new Global Fund grant to Indonesia (or alternatively, commodities could be purchased under CTB, itself, if the GF grant is delayed,- as discussed and agreed with the USAID mission and the USAID technical focal point).

To ensure the quality assurance diagnostic inside of laboratory network at district level (not only for microscopy, but also Xpert, and C/DST), CTB will facilitated DHO to develop a CTB (district-centered) laboratory plan.

At the national level (BPPM), CTB will continue to support a costed National Laboratory (Action) Plan 2015-2019 finalization. Its completion will rely entirely on the joint efforts of KNCV/JSI/Adelaide-SRL, with a new expected delivery date of 7 November for a complete draft. There are three laboratory-planning components critical to CTB success that should be prioritized under APA2: 1) Xpert and culture/DST rollout, including EQA; 2) expanded scope for proposed IRLs beyond EQA alone to include a role in ICF, as part of Xpert expansion planning; 3) The sample transportation system within the laboratory network, still being the weakest link in the laboratory network, needs to be rethought based on the experiences gained in the USIAD Deliver/ JSI project.

**- Intensified case finding (including screening of priority risk groups) [Intervention area 3.1]**

ICF is one of two core components to address low case detection/notification. ICF will be oriented at the primary health care level to introduce new screening algorithms that combine access to GeneXpert and chest Xray (CXR). This will be further facilitated by establishing coordination and collaboration with other relevant programs, e.g. geriatric medicine, diabetes mellitus (DM) care services, maternal, neonatal and child health services (MNCH), pediatric medicine and occupational health services, to encourage them to integrate TB awareness and screening into their routine activities with strong referral mechanisms.

Besides ICF, an extended contact investigation (eCI) program centered in the community at clinic level will be a second core component. The eCI will move away from a passive approach to one based on active engagement of households. Although this approach is still to be determined/developed, it will be done as part of the Core Research Project on evaluating transmission. Infection control strategies will be designed for various service delivery levels, linked to the locally adapted FAST strategy (TEMPO).

Activities in prisons will address the introduction and standardization of TB services, linked to HIV care. All prisons located in CTB areas will be covered as an extension of district and provincial health services. Mass screening and introduction of CXR will be rolled over into sustainable routine services such as entry screening, CI and IPT. Linking of the prison and civilian sectors will be an essential component, including post-release planning for TB and TB-HIV patients.

TB-HIV: Several core activities will be supported : provider-initiated HIV testing of all TB patients preferably at the TB facility, referral with initiation of ART for all HIV-positive TB patients, improved TB screening among HIV patients using GeneXpert and introduction of IPT for those without active disease. CSOs will be an important link between TB and HIV programs by expanding the demand for enhanced access to respective services linked to the delivery of quality comprehensive care.

Strengthened TB-HIV collaboration will also be an important element of a strengthened private sector engagement (PPIP - public-private interface platform).

**- Standardized treatment with supervision and treatment monitoring [Intervention area 3.2]**

Case finding efforts will have to be matched with activities and interventions improving case holding (supervision and treatment monitoring for all TB cases). The new component developed under CTB will be to establish and/or broaden engagement with CSOs, specifically to determine their role in creating demand for TB services and providing patient support for treatment monitoring. Lessons will be taken from HIV community efforts and adapted for TB. All efforts around improved standards of care will be integrated across the key areas of PMDT, TB-HIV and routine TB patients, and across the public-private delivery spectrum.

**- PMDT [Intervention area 3.2]**

Indonesia currently is one of the few countries implementing bedaquiline under programmatic conditions, it applies CEM for a maximum of 150 patients (100 of whom are/will be receiving bedaquiline). In APA 2, CTB will assist NTP Indonesia to prepare for PV data collection for all MDR-TB patients in country, starting with the three bedaquiline pilot sites.

The introduction of expanded cohort reviews in selected facilities by ATS during TB CARE 1 has established a useful clinical cohort review system (and patient tracking tool). Under APA2 the responsibility and implementation will be transitioned to the NTP and the system will be established at the national level to ensure national engagement, oversight, and programmatic relevance. The present cohort review system is primarily centered around the PDPI (Pulmonologist Professional Association) but is being expanded to include internists. During APA2 CTB will ensure that the system will be extended to all PMDT sites and providers in CTB priority areas.

**- Health systems strengthening (governance to build political commitment and leadership and sustainability) [Intervention area 7.2]**

One of the efforts to ensure the sustainability of the universal access program is through political commitment, regulation and standardization of TB services. The key pull mechanisms to address universal access and sustainability will be through the rapidly expanding national health insurance scheme (JKN) and upgraded minimum service standards for TB (SPM) linked to district funding. The design of individual district approaches will depend on the initial discussions with the Bupati and key stakeholders during the district assessments and the findings of the latter.

In national level, revision of the National Guidelines for Care & Medicine (Pedoman Nasional Pelayanan Kedokteran – PNPK) and national TB guidelines (including IPT/CI) will be needed along with relevant SOPs for new approaches and interventions (e.g. ICF for various risk groups). This will be translated into the development of a regulatory framework for the Minimum Standards for Basic Service (SPM) implementation at district level, which is required to ensure that TB control program receives an adequate allocation in the local governments' planning and budgeting.

At province level, on governance and advocacy, CTB will involve *BUPATI* (District Mayor) , select members from the local parliament, the *DINAS* (Health office) , the district planning agency (*BAPPEDA*) , and the local government executive budgeting team have to be engaged in the process.

**- Engaging all providers (Public Private Mix – PPM) [Intervention area 7.2]**

According to the NPS 2013 data, at least 42% of participants on TB treatment during the time of the survey were receiving treatment in the private sector. Therefore, the private sector engagement is a high priority for the CTB program.

The main intervention priority in TB PPM, besides ensuring integration into quality assured health care provision, will be in the development of a PPM engagement system, addressing governance/ political commitment/ regulatory framework, leadership and sustainability. It is proposed to re-label this effort under a PPIP (Public Private Interface Platform) banner. PPIP will require full consideration and integration of 3 key actors: GPs, (government/non-government) hospitals and CSOs with a balanced engagement covering both the provider and demand sides. CTB will be able to tap into the experience of the multi-stakeholder forum approach of the Kinerja governance project in terms of set-up, management and long-term resource mobilization approaches.

CSO participation will be developed and deployed to increase demand for services (push) and monitor delivery quality (pull). CSOs can add value in areas where the public system lacks adequate infrastructure, primarily in community-based case finding activities, such as CI, as well as social support and monitoring of difficult cases such as PMDT patients or IPT for high-risk groups. CSO mapping, skills assessment and training needs will be an important component of the district epi and governance assessments.

**- Health information strengthening (to ensure quality data, surveillance and M&E) [Intervention areas 10.1.]**

Health information Strengthening is the key to answered gaps related to quality of data, surveillance, and interoperability. Linking diagnosis to treatment and monitoring documentation is a fundamental barrier. Support for implementation of the mandatory notification system will be required but is insufficient. To date, various HIS components have evolved through a largely piecemeal approach to address various data, software, and infrastructure issues as they arise. Besides SITT and e-TB Manager, sitting within the NTP, there are at least 10 other HIS systems that touch TB (SIHA for HIV, SIKDA for MOH, MESO for FDA/PV, JKN, SIRS, and individual district systems). There is not yet a comprehensive whole data solution or strategy that links facility level (needed for patient care and commodity forecasting) to central level (needed for program management) using optimized HIS approaches and e/m-health tools. At the national level, this requires close coordination and demonstrates the need for a national IT/DM steering committee (beyond the current NTP Surveillance Team capacities and mandate). Fortunately for CTB, the NTP has very recently agreed on the need for a new IT platform, module based, that will look at total data needs for TB surveillance and reporting, and which will account for full interoperability. Future short-term fixes will be restricted to allow for mandatory reporting into the SITT/e-TB databases while a comprehensive redesign is developed under APA2. The introduction and implementation of the redesign will likely fall under APA3.

**- Human resource development [Intervention area 11.1]**

With the CTB approach to create the best model at the district level, the strengthening of the capacity of HR for KNCV and CTB partners became crucial, besides planning of HR requirements to support case finding and notification. Therefore it is necessary that the development of comprehensive intervention packages include thorough task analyses in terms of capacity (skills and volume) to facilitate the change in strategy at facility, district, provincial and national levels. This HRD assessment is meant to inform both the financial planning (adequate staff allocation needs and projected cost/ budget implications) and the TB specific curriculum/training strategy. The national Training of Trainers program (MOH-BPPSDM) should be reviewed and updated to meet the specific CTB packages. HRD is the highest priority for preparing APA2 implementation. A HRD consultant with experience in Indonesia is expected in early 2016.

## 9. Annex I: Year 1 Results on Mandatory Indicators

MANDATORY Indicator				
<i>Please provide data for the following mandatory indicators:</i>				
2.1.2 A current national TB laboratory operational plan exists and is used to prioritize, plan and implement interventions.	National APA 1	CTB APA 1	CTB APA investment 1	Additional Information/Comments
<b>Score</b> as of September 30, 2015	0	N/A	Substantial	CTB provided TA and external consultant, Richard Lumb in developing National Action Plan for Laboratory. It will be finalized in Q1 APA2.
2.2.6 Number and percent of TB reference laboratories (national and intermediate) within the country implementing a TB-specific quality improvement program i.e. Laboratory Quality Management System	National APA 1	CTB APA 1	CTB APA investment 1	Additional Information/Comments
<b>Number and percent</b> as of September 30, 2015	0% (0/3)	N/A	Moderate	Framework and training for LQMS has been prepared in APA1, and training will commence in APA2. First priority is for NRLs which will be involved in training PRLs. The 3 NRLs are: 1. Microbiology UI : NRL for Molecular 2. BBLK Surabaya: NRL for C/DST 3. BBLK Bandung: NRL for Microscopy
2.2.7 Number of GLI-approved TB microscopy network standards met	National APA 1	CTB APA 1	CTB APA investment 1	Additional Information/Comments
<b>Number of standards met</b> as of September 30, 2015	4	N/A	Moderate	The 4 standards are met: 2, 3, 6, and 11.
2.3.1 Percent of bacteriologically confirmed TB cases who are tested for drug resistance with a recorded result.	National 2014	CTB 2014 ( 10 intensified Districts)	CTB APA investment 1	Additional Information/Comments
<b>Percent (new cases), include numerator/denominator</b>	0.3% (662/193,321)	1.4% (283/18,968)	Moderate	Currently the NTP policy for drug resistance test and GeneXpert use is only for presumptive MDR TB and TB in PLHIV. Patients with bacteriologically confirmed TB which is not presumptive MDR TB (9 category) are currently not tested.
<b>Percent (previously treated cases), include numerator/denominator</b>	77% (4,945/6,449)	64% (1,195/1,871)		
<b>Percent (total cases), include numerator/denominator</b>	3 % (5,607/199,770)	7% (1,478/20,839)		
3.1.1. Number and percent of cases notified	National 2014	CTB 2014	CTB APA investment 1	Additional Information/Comments

by setting (i.e. private sector, pharmacies, prisons, etc.) and/or population (i.e. gender, children, miners, urban slums, etc.) and/or case finding approach			investment	
<b>Number and percent</b>	Total: 324,539 Non NTP Public: 17.7% (57,586/324,539) Non NTP Private: 8.6% (28,186/324,539) Children: 7.1% (23,235/324,539)	Total: 40,577 (10 intensified Districts) Non NTP Public 26.6% (10,803/40,577) Non NTP Private 16.8% (6,833/40,577) Children: 10.1% (4,193/40,577)	Substantial	Case notification by other key populations (TB-DM, TB-HIV), and case finding approach is currently unavailable. The 10 intensified districts that are located in 5 focus provinces are: 1. Deli Serdang (North Sumatera) 2. Medan City (North Sumatera) 3. East Jakarta (DKI Jakarta) 4. North Jakarta (DKI Jakarta) 5. Bandung City (West Java) 6. Bogor (West Java) 7. Surakarta City (Central Java) 8. Semarang City (Central Java) 9. Tulung Agung (East Java) 10. Jember (East Java)
3.1.4. Number of MDR-TB cases detected	National APA 1	CTB APA 1	CTB APA investment 1	Additional Information/Comments
Total 2014	1812	1299	Substantial	In APA 1, CTB covered 5 intensified provinces (North Sumatera, DKI Jakarta, West Java, Central Java, East Java). Rifampicin Resistant counted as MDR-TB
Jan-Mar 2015	443	306		
Apr-June 2015	515	365		
Jul-Sept 2015	460	330		
To date in 2015	1418	1001		
3.2.1. Number and percent of TB cases successfully treated (all forms) by setting (i.e. private sector, pharmacies, prisons, etc.) and/or by population (i.e. gender, children, miners, urban slums, etc.).	National 2013 cohort	CTB 2013 cohort	CTB APA investment 1	Additional Information/Comments
<b>Number and percent</b> of TB cases successfully treated in a calendar year cohort	Getting from WHO	84% (33,048/39,571) (10 districts)	Substantial	Disaggregated data is not available due to limited regular recording and reporting.
3.2.4. Number of MDR-TB cases initiating second-line treatment	National APA 1	CTB APA 1	CTB APA investment 1	Additional Information/Comments
Total 2014	1,284	974	Substantial	It is including RR-TB. CTB APA1 covered 5 provinces.
Jan-Mar 2015	368	279		
Apr-June 2015	380	300		
Jul-Sept 2015	349	265		
To date in 2015	1097	844		
3.2.7. Number and percent of MDR-TB cases	National	CTB 2012 cohort	CTB APA 1	Additional Information/Comments

successfully treated	2012 cohort		investment	
<b>Number and percent</b> of MDR-TB cases successfully treated in a calendar year cohort	Getting from WHO	56% (217/389)	Substantial	Data reported from 5 CTB provinces. Source: ETB Manager
5.2.3. Number and % of health care workers diagnosed with TB during reporting period	National 2014	CTB 2014	CTB APA investment 1	Additional Information/Comments
<b>Number and percent</b> reported annually	U	U	Moderate	During APA 1, CTB supported screening for HCWs in two PMDT referral hospitals (Syaiful Anwar Hospital and Jayapura Hospital) as an initial step to later health services can make this as routine activities. This screening was prioritized for HCWs who handled TB and MDR-TB patients. There were 13 HCWs from Syaiful Anwar Hospital and 15 HCWs from Jayapura Hospital have been screened. Results showed that there was no HCWs with MTB detected.
6.1.11. Number of children under the age of 5 years who initiate IPT	National 2014	CTB 2014	CTB APA investment 1	Additional Information/Comments
<b>Number</b> reported annually	U	U	Moderate	IPT for children has been implemented in country but surveillance system for this program is not established yet.
7.2.3. % of activity budget covered by private sector cost share, by specific activity	National APA 1	CTB APA 1	CTB APA investment 1	Additional Information/Comments
<b>Percent</b> as of September 30, 2015 (include numerator/denominator)	N/A	N/A	None	No CTB activities in APA I covered by private sector cost share.
8.1.3. Status of National Stop TB Partnerships	National APA 1	CTB APA 1	CTB APA investment 1	Additional Information/Comments
<b>Score</b> as of September 30, 2015	1	N/A	None	Will be updated after STOP TB Partnership Indonesia (STPI) submit the response to the questionnaire
8.1.4. % of local partners' operating budget covered by diverse non-USG funding sources	National APA 1	CTB APA 1	CTB APA investment 1	Additional Information/Comments
<b>Percent</b> as of September 30, 2015 (include numerator/denominator)	N/A	N/A	None	No local partner in CTB APA I.
8.2.1. Global Fund grant rating	National APA 1	CTB APA 1	CTB APA investment 1	Additional Information/Comments

Score as of September 30, 2015	PR1 (MoH):B1 PR2 (Aisyyah):A1	N/A	Substantial	The latest score for Global Fund Grant Rating is B1 for PR1 and A1 for PR2 (Jul-Dec 2014). Score for period Jan-Jun 2015 is under review by LFA.
9.1.1. Number of stock outs of anti-TB drugs, by type (first and second line) and level (ex, national, provincial, district)	National APA 1	CTB APA 1	CTB APA investment 1	Additional Information/Comments
Number as of September 30, 2015	First Line -Category 1: 7 districts -Category 2: 31 districts -TB drugs for Children: 33 districts Second Line: 0	First Line: -Category 1: 0 -Category 2: 2 districts -TB Drugs for Children: 0  Second Line: 0	None	Stock of anti-TB drugs is reported quarterly. Latest data available is April-June 2015. NTP defines stock out as zero stock or stock with expired date of drugs no longer than treatment period (6 months for category 1, 8 months for category 2, and 6 months for TB drugs for children. Data is available only in districts level, not facility level.
10.1.4. Status of electronic recording and reporting system	National APA 1	CTB APA 1	CTB APA investment 1	Additional Information/Comments
Score as of September 30, 2015	3	N/A	Substantial	CTB provided TA for implementation of SITT
10.2.1. Standards and benchmarks to certify surveillance systems and vital registration for direct measurement of TB burden have been implemented	National APA 1	CTB APA 1	CTB APA investment 1	Additional Information/Comments
Yes or No as of September 30, 2015	No	N/A	None	Currently, the tool is not used by NTP. The standards and benchmarks for surveillance previously conducted by external consultants from WHO HQ during JEMM 2013.  The National vital registration system is not existing in country. NIHRD conducted 2 sample vital registration system with different settings (districts and sub district) each covered 8 million population. The results are still on data analysis (TA provided by WHO HSS unit). For 2015, funding support from the Global Fund will only be used to cover field costs to conduct household Verbal Autopsy (VA) interviews, and to support field supervision of data collection, and partial costs for physician

				review for diagnoses of VA questionnaires.
10.2.6. % of operations research project funding provided to local partner (provide % for each OR project)	National APA 1	CTB APA 1	CTB APA investment 1	Additional Information/Comments
Percent as of September 30, 2015 (include numerator/denominator)	N/A	N/A	Moderate	During APA1, CTB is preparing OR for TB screening among selected high risk groups. Elderly, male smokers, and ex-TB patients were selected as high risk groups. This OR will be implemented in APA2.
10.2.7. Operational research findings are used to change policy or practices (ex, change guidelines or implementation approach)	National APA 1	CTB APA 1	CTB APA investment 1	Additional Information/Comments
Yes or No as of September 30, 2015	N/A	N/A	Limited	CTB will implement OR in APA 2, i.e OR for TB screening among selected high risk groups, elderly, male smokers and ex -TB patients. The result expected to be available in APA 2.  Beside that, CTB also provide TA to support 2 major research funded by GF: Inventory study and DR TB surveillance which intended to provide strong evidence for decision making at PPM and PMDT. The studies are planned to be implemented started from 1 January 2016
11.1.3. Number of health care workers trained, by gender and technical area	CTB APA 1		CTB APA investment 1	Additional Information/Comments
			Substantial	
	# trained males APA 1	# trained females APA 1	Total # trained in APA 1	Total # planned trainees in APA 1
1. Enabling environment	237	567	804	
2. Comprehensive, high quality diagnostics	10	29	39	
3. Patient-centered care and treatment	525	1066	1591	
4. Targeted screening for active TB	0	0	0	
5. Infection control	0	0	0	
6. Management of latent TB infection	0	0	0	
7. Political commitment and leadership	0	0	0	
8. Comprehensive partnerships and informed community involvement	0	0	0	

9. Drug and commodity management systems	3	7	10	
10. Quality data, surveillance and M&E	141	300	441	
11. Human resource development	0	0	0	
Other (explain)			0	
Other (explain)			0	
<b>Grand Total</b>	<b>916</b>	<b>1969</b>	<b>2885</b>	<b>0</b>
11.1.5. % of USAID TB funding directed to local partners	National APA 1	CTB APA 1	CTB APA 1 investment	Additional Information/Comments
<b>Percent</b> as of September 30, 2015 (include numerator/denominator)	N/A	0.8% (29,831/3,509,886)	None	In APA I (December 2014), CTB contracted University of Gadjah Mada for development of TB and TB-HIV joint concept note (continuation from TB CARE I budget as contract amandement).

## 10. Annex II: Status of EMMP activities

Year 1 Mitigation Measures	Status of Mitigation Measures	Outstanding issues to address in Year 2	Additional Remarks
<p>Education, technical assistance and training about activities that inherently affect the environment include discussion prevention and mitigation of potential negative environmental effects.</p>	<p>One batch safe working practice training has been done in NRL BBLK Surabaya on 28 Sept – 2 Oct 2015. 12 lab technicians from 11 laboratories now have adequate skill and knowledge to do safe practice in TB Laboratories to protect them self, other staff and environment as well</p>	<p>One batch safe working practice training will be conducted in year 2</p>	<p>N/A</p>
<p>CTB is planning to procure drug powder for 2nd line DST in Q4 APA 1. The drug powder will be distributed to 12 Laboratories in 9 provinces (West Java, Central Java, East Java, Jakarta, Yogya, North Sumatera, South Sumatera, South Sulawesi, Papua). CTB will facilitate supervision of 12 C/DST laboratories in 9 provinces. During the supervision, NTP and NRL will ensure that the storage and distribution of these materials are done properly.</p>	<p>Procurement of drug powder for 2nd line DST in Q4 APA 1 by CTB was cancelled due to USAID regulation is not permit to procure this item.</p>	<p>N/A</p>	<p>N/A</p>
<p>2. a.number of TB Lab using LED FM b. of trained TB Lab technicians on LED FM implementation c. Number of TB Lab participation in EQA  CTB will train TB Lab technicians</p>	<p>NRL Microscopy (BLK Bandung), Hasan Sadikin Hospital and Rotinsulu Hospital have been trained on using LED FEM, Piloting in above 3 sites is in progress</p>	<p>Scale up implementation of LED FM Training on LED FM implementation routinely done Routine EQA participate by 90% TB Lab</p>	

<p>on using the LED FMs, conduct trial in 3 piloting sites in Bandung (BLK, Hasan Sadikin Hospital and Rotinsulu Hospital, conduct panel testing to those three laboratories</p>			
<p>NTP plans to procure 42 Xpert machines and cartridges in APA 1. Used Xpert cartridges may have negative environmental impact, if not disposed properly. CTB will provide Technical Assistance to ensure that Xpert site will implementing waste disposal standard from National Guidelines and the biosafety module on Xpert included on lab training. CTB will facilitate supervision of Xpert sites. During the supervision, adequate focus will be made on the waste management practices to make sure that these sites follow the National Guidelines.</p>	<p>Biosafety module on Xpert already included in the Xpert training module.</p>	<p>CTB will facilitate supervision to Xpert sites to ensure the sites follow the national guideline</p>	<p>N/A</p>